



HIGH MACH

Serving the World's Premier Flight Simulation Test Complex



Vol. 59, No. 18

Arnold AFB, Tenn.

September 21, 2012

Test helps determine feasibility of high energy lasers

AEDC Supporting the warfighter

By Patrick Ary
Aerospace Testing Alliance

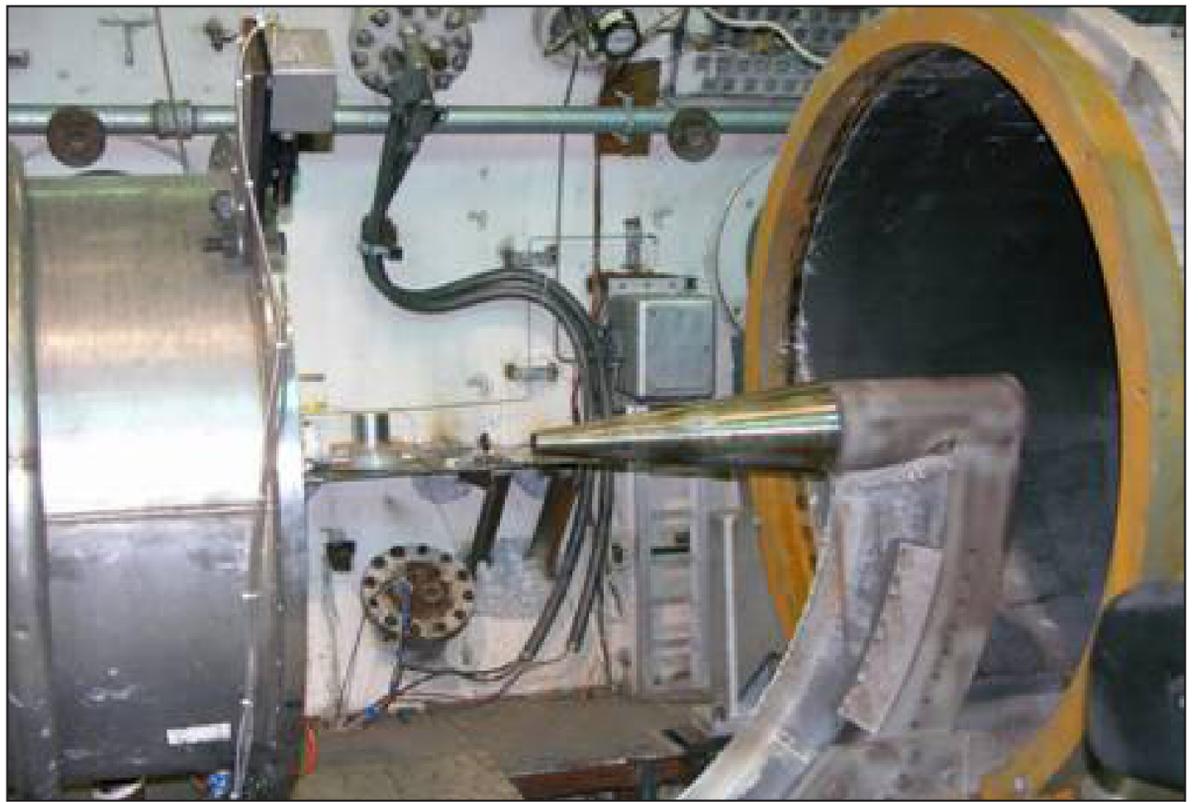
Successful testing at Arnold Engineering Development Complex (AEDC) is giving the Air Force Research Laboratory (AFRL) valuable data that will help determine the feasibility of high energy lasers for the warfighter.

AFRL's Directed Energy Directorate (AFRL/RDLE) out of Kirtland Air Force Base, N.M., is testing high power lasers against materials of interest under simulated flight conditions in AEDC's Aerodynamic and Propulsion Test Unit (APTU). Testing began in April and was completed in August.

"The bottom line is that directed energy is at a transition point right now," said Robert Ulibarri, program manager for AFRL's Laser Effects Branch. "This kind of testing is going to determine whether high energy lasers are viable or not for the warfighter."

One of AFRL's primary interests is in material removal under airflow when a laser is applied to the material – essentially, whether it enhances the material removal process. This is the first APTU dedicated test series for looking at material responses under flight-representative airflow temperature and pressure conditions, Ulibarri said.

"We've done a lot of testing under static conditions that are under sub-Mach airflow," he said. "We're moving into a regime now where we want to look at the



The gap between the AEDC Aerodynamic and Propulsion Test Unit's nozzle and diffuser was widened to 54 inches in order to increase flexibility during Air Force Research Laboratory testing and allow more of the test article. Before making the modification, AEDC engineers used Computational Fluid Dynamics to ensure the work would not affect the test. The modification was one of several made to accommodate the AFRL test. (Photo provided)

effects during simulated flight, and that's why we're [at AEDC]."

APTU is capable of simulating true temperature and pressure conditions in the Mach 3 to Mach 8 range. Those were test conditions AFRL wanted to test under, but in order to bring the test to AEDC the complex had to modify the APTU to accommodate specific equipment the customer needed to bring – lasers, diagnostic equipment, instrumentation and independent

generators to ensure an adequate supply of power to AFRL equipment.

"At the end, you're putting a laser on a target," said AEDC APTU program manager Capt. Alex Hausman. "But there is a lot of upfront infrastructure that came together to do this."

APTU's tunnel was modified with ports installed to accommodate the laser transmission into the test cell while maintaining the test environment (partial vacuum).

Shutters were also installed on the windows to protect them from contamination during the facility start-up and shutdown events.

Another major change involved widening the existing 17-inch gap between the nozzle exit and diffuser entrance to 54 inches in order to expose more of the test

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AFMC Commander to speak at the ACC dinner

By Patrick Ary
Aerospace Testing Alliance

The date for the Arnold Community Council's (ACC) annual dinner has changed to Oct. 12 and Air Force Materiel Command Commander Gen. Janet C. Wolfenbarger will be the special guest speaker.

Wolfenbarger was commissioned in 1980 as a graduate of the U.S. Air Force Academy and began her career in acquisition as an engineer at Eglin Air Force Base, Fla. She served as AFMC vice commander from December 2009 to September 2011 and then was the military deputy for the Office of the Assistant Secretary of the Air Force for Acquisition in Washington until June of this year, when she became the Air Force's first female four-star general and AFMC commander at Wright-Patterson Air Force Base, Ohio.

Individual seats for the banquet are \$75 per person and include a one-year Arnold

Community Council membership.

A \$350 Silver sponsorship includes five reserved seats at a table with the sponsor name, five one-year ACC memberships and recognition in the event program, the dinner slide show and on the ACC website.

A \$700 Gold sponsorship includes 10 reserved seats at a table with the sponsor name, 10 one-year ACC memberships and recognition in the event program, the dinner slide show and on the ACC website.

To purchase a table or individual tickets, contact Harry Brittain at (931) 247-5417, Steve Cope at (931) 212-4093 or Temple Bowling at (931) 455-3234. RSVPs may be made to 2012dinner@arnoldcommunitycouncil.com.

The Arnold Community Council was established in 2000 to promote, protect and preserve Arnold Engineering Development Complex and to facilitate interaction and cooperation between the center



Gen. Wolfenbarger

and surrounding communities. The Council's Board of Directors represents Southern Middle Tennessee and Alabama. For more information, visit the ACC website at www.arnoldcommunitycouncil.com.

AFMC vice commander visits AEDC

Lt. Gen. Andrew E. Busch, vice commander, Air Force Materiel Command, speaks to a group of Airmen at Arnold Engineering Development Complex Sept. 6 inside the J-1 Turbine Engine Test Cell. Behind Busch is an F-119 engine for the F-22 Raptor which is at the Complex to undergo augmentor characterization testing using hydro-treated renewable jet fuel, and a hydrocarbon synthetic jet fuel created from animal fats and plant oils. (photo by Rick Goodfriend)



ATA reduces personnel by 17

By Kathy Gattis
Aerospace Testing Alliance

Aerospace Testing Alliance (ATA), prime contractor at the Arnold Engineering Development Complex (AEDC), will reduce its work force by 17 people in Fiscal Year 2013 (FY13).

The company announced it will cut eight salaried and nine wage positions primarily because of skill mix issues.

"We were hoping to avoid an involuntary reduction," said ATA General Manager, Steve Pearson. "We feel deeply for the personnel affected and we will do everything we can to help those employees. But the skills mix issue is real and is something we had to address so we could successfully accomplish the work."

Pearson said some employees whose positions were affected by budget changes were offered open positions in other areas of ATA. However, the reassignment opportunities still didn't prevent a forced reduction.

"Even though our workload for next year increased, the type of work we're doing will shift to more testing, which in the end, is why we are here," Pearson said.

ATA will provide job counseling services including resume development, skills self-assessment, interview techniques, resume distribution and job search assistance.

Notifications for the involuntary reduction-in-force were issued Sept. 14, with a departure date of Friday, Sept. 28.

Twenty-eight employees volunteered for a reduction-in-force last month.

ATA has been the operating contractor at AEDC since 2003.

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HIGH MACH

Arnold Engineering Development Complex
An Air Force Materiel Command Test Complex

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High Mach is published by *The Tullahoma News*, a private firm in no way connected with the U.S. Air Force, Arnold Engineering Development Complex (AEDC) or Aerospace Testing Alliance (ATA), under exclusive written contract with ATA, center support contractor, at Air Force Materiel Command's AEDC, Arnold AFB, Tenn., 37389.

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The *High Mach* office is located at 100 Kindel Drive, Suite B212, Arnold AFB, Tenn. 37389-2212. Editorial content is edited and prepared by AEDC support contractor ATA. Deadline for copy is Wednesday at close of business the week before publication.

This commercial enterprise newspaper is an allowable ATA contractor publication for personnel at AEDC.

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Core Values

- Integrity first
- Service before self
- Excellence in all we do



Vision

"ATA will be a trusted partner in delivering best value warfighter support and assert stewardship to AEDC"

Core Values

- Be accountable for our own actions
- Ensure the safety of individuals and equipment
- Demonstrate the highest integrity and ethical standards
- Communicate clearly and openly
- Deliver professional and technical excellence
- Nurture, enable and treat people fairly
- Align with customer goals and objectives
 - Use disciplined and innovative processes
- Continually improve in all that we do

Never Leave a Man Behind

By 2nd Lt. Chance Johnson
AEDC Test Systems Acquisition Branch

"Never leave a man behind" is perhaps the most well-known military motto, as it transcends generations, branches of service, and even civilian thought; its importance undoubted by the POW/MIA community and its significance to the Air Force validated by its inclusion in the last stanza of the Airman's Creed. As the definition of conflict and war evolves and our enemy becomes less-defined, this motto's legacy has begun to erode. As Americans, it is our duty to uphold the value of this axiom on behalf of all prisoners of war and the men and women missing in action, past, present, and future. However, with that aim, we must not succumb to the will of terrorists nor ever negotiate with such an enemy.

A disagreeing premise to the "Never leave a man behind" mantra, that has grown more prevalent in recent conflicts, is our refusal to negotiate with

terrorists. This debate has become relative in the case of current POW Army Sgt. Bowe Bergdahl. It has been more than 3 years since the Haqqani network, officially classified as a foreign terrorist organization underneath Secretary of State Hilary Clinton, took Bergdahl captive. It is claimed that the military is doing everything in its power to recover Sgt. Bergdahl. The extent of that power has opened the discussion of a possible prisoner swap, thus U.S. negotiations with terrorists.

The problem in negotiating with terrorists is that regardless the outcome, the U.S., as the abiding party, is always worst off. Just as paying a large ransom for a hostage encourages extortion; the release of terrorist prisoners would only serve to promote future captures - not to mention the potential harm these terrorists could have on our country if provided the opportunity to plan and carry out a terror-

ist attack upon their release. These terrorists are intent on harming our nation and its people in some way or form, and will undoubtedly ignore any risk of being captured if they know they can simply be traded for American captives. Inevitably, they will make every effort to capture more American soldiers in order to use them as bargaining chips. I will refrain from using the utilitarian argument in this instance (though it may already be apparent), as it would counter my arguments that are to follow regarding the course of action that must be followed in POW situations.

I concede that my arguments for what should be done in a POW situation differ from any action I might take in such a scenario where the captive was my brother, sister, or a loved one. While caving to the terrorists' demands would only perpetuate the capturing of more soldiers, I cannot blame the soldier's mother or father for doing



so. On the other hand, we must not allow what would be done by a selfish individual, like me, to permeate into planning for what should be done by a nation when one of its defenders is held captive.

If we can entrust a soldier with defending our lives, he or she should be able to entrust in us the same. Instead of considering useless tactics such as negotiating with terrorists, we should use the full might of our armed forces for the sake of rescuing our POWs. If we must put a hundred soldiers in harm's way to rescue one, so be it, it must be done. You may recall another military motto, "all for one, one for all." The confidence this gives our soldiers is what makes us the most powerful

military on Earth today. Instead of wavering in deliberation, we must act boldly and swiftly and without reservation for the sake of our men and women who we have put in harm's way to protect us.

Generations pass, conflicts come and go, but our values remain the same. There are many reasons a nation cannot act in the same capacity as an individual. Negotiating with terrorists achieves nothing and doing so will cause more harm than good. Instead of capitulating we must act courageously and bolster the sense of fear within our enemies. We must ensure they know we are the greatest force on Earth and we will never leave a man behind.

AEDC firefighters complete 9/11 Memorial Stair Climb



Front row, l - r, George DeShields IV, Baker Volunteer Fire Department (VFD), Fla., Dennis Eggert, an AEDC Fire Department (FD) crew chief, and Jim Wenger, an AEDC FD Assistant Chief for Operations, hold a sign proudly proclaiming their team's completion of the 3rd Annual 9/11 Memorial Stair Climb held on Sept. 9 at the William R. Snodgrass Tennessee Tower in downtown Nashville. Back row, l - r, George DeShields III, an AEDC FD Assistant Chief for Operations, Kenneth Locker, AEDC FD driver/operator, Anthony Jimcoily, AEDC FD firefighter, Aaron Brown, Hillsboro VFD firefighter and Lonnie Brown, AEDC FD driver operator, were the other members of the team participating in the event. DeShields IV is the son of AEDC's George DeShields III and Aaron Brown was a 2012 coop student employee at Arnold. Nashville's annual 9/11 stair climb sends 343 firefighters up 110 flights of stairs to honor the memory of the 343 members of the New York City fire department who perished in the Twin Towers while attempting to evacuate and rescue the building's occupants during the national tragedy of Sept. 11, 2001. (Photo provided)

Leaders issue Air Force birthday message

WASHINGTON (AFNS) - Secretary of the Air Force Michael Donley, Air Force Chief of Staff Gen. Mark A. Welsh III and Chief Master Sgt. of the Air Force James Roy issued the following message to the Airmen of the United States Air Force:

As we celebrate the United States Air Force's 65th birthday, we salute all of the dedicated Airmen who serve or have served in our nation's youngest and most innovative Service.

Throughout our proud history, the Air Force has embraced the technology that continues to revolutionize our capabilities in air, space and cyberspace.

We owe an enormous debt to the ground-breaking visionaries and engineering pioneers who brought the technology of flight to life, and to the professional strategists and tacticians who imagined the military possibilities of these new technologies and propelled the science, theory and application forward.

While our service enjoys an unbreakable connection to state-of-the-art technology, we must never forget that everything we do depends on our people, the living engine of our Air Force. Today, more than ever, the Air Force can take pride that our Service culture promotes and benefits

from the know-how, determination, and commitment of a diverse group of men and women who embody our Core Values - Integrity First, Service Before Self, and Excellence In All We Do - while pursuing adaptive and innovative solutions for our nation's security.

Every day, our Airmen have an opportunity to add a bright new chapter to the Air Force story by serving our nation in the world's finest air force. The challenges confronting our country are great; but our active duty, Guard, Reserve, and civilian Airmen have never failed to answer our nation's call. Working

together in common purpose as one Air Force, we will keep America secure today and for all the years

to come. Happy birthday, Air Force! Aim High ... Fly-today and for all the years Fight-Win!

Action Line

Team AEDC
I believe in free and open communications with our Team AEDC employees, and that's why we have the Action Line available. People can use the Action Line to clear up rumors, ask questions, suggest ideas on improvements, enter complaints or get other issues off their chests. They can access the Action Line in one of three ways: via the AEDC intranet home page, Action Line boxes at the base cafeterias and by calling 454-6000.

Although the Action Line is always available, the best and fastest way to get things resolved is by using your chain of command or by contacting the organization directly involved. I encourage everyone to go that route first, then if the situation isn't made right, give us a chance.

Col. Raymond Toth
AEDC Commander

Smoking Policy

1. The following revised AEDC smoking policy is effective immediately. Smoking is permitted solely in designated areas identified by a plastic "smoke genie." This receptacle is for the sole purpose of cigarette butt disposal. If there is no receptacle, you cannot smoke in that area. It is the responsibility of all smokers to clean up the area surrounding the receptacles for any cigarette butts on the ground. Smoking in government-owned vehicles is strictly prohibited. Personnel are allowed to smoke in their personal vehicles at any time. In case of inclement or cold weather, employees are encouraged to use their personal vehicles if a sheltered designated smoking area is not available nearby. Smoking areas will be held to the absolute minimum and will be located at https://portal.arnold.af.mil/PORTALimages/Smoking_area_map.pdf. Smoking near a facility in an area not designated on the map is prohibited and any smoking receptacles located in areas not shown on the map will be removed. All "smoking permitted" and "no smoking" signs will be removed unless specifically required by OSHA.

The fact a person smokes has no bearing on the number of breaks they may take. Breaks should be taken in accordance with the company/agency personnel policies that apply to all employees.

Regarding use of smokeless tobacco, containers of tobacco waste product, including sealed containers, must not be left unattended or disposed of in trash receptacles. Users of smokeless tobacco must flush tobacco waste down the toilet. Smokeless is strictly prohibited in conference room meetings and other areas, e.g. PMEL, where Air Force regulations specifically prohibit.

Due to the nature, appearance, and safety concerns of electronic cigarettes (also known as "e-cigs"), they are considered to be in the same category of tobacco products whose use is governed by Air Force Instruction (AFI) 40-102, Tobacco Use in the Air Force. Therefore, all rules stated above for tobacco products apply to electronic cigarettes.

2. Supervisors at every level will ensure this policy is followed. Disciplinary action is appropriate for repeated violations.

3. Updates to this policy will be made in the future to further align with Air Force guidelines.

4. This letter supersedes previous letter dated 28 October 2006, subject as above.

AEDC's Fire Department urges everyone to "Have Two Ways Out"

By Daryl Van Cise
AEDC Fire Department

It's 3 a.m. You and your family are sound asleep and awake to the beeping smoke alarm. You are tired and confused from the effects of the smoke. You know you need to get to safety, but when you head for the front door, you find that escape route is blocked by fire that is spreading by the second. What do you do?

While this scenario is one I hope you never have to encounter, the statistics tell us that many people do every day. According to the nonprofit National Fire Protection Association (NFPA), one home structure fire was reported every 85 seconds in 2010. That added up to 369,500 home structure fires, which caused 13,350 injuries and 2,640 deaths. We also know that most fatal fires kill one or two people. However, in 2010, 19 home fires killed five or more people, resulting in 101 deaths.

The numbers are scary, but there is something you can do to help ensure your family's safety should a fire break out in your home: Have Two Ways Out!

AEDC's Fire Department is teaming up with NFPA during Fire Prevention Week, October 7-13, 2012, to urge residents to "Have Two Ways Out!" This year's theme focuses on the importance of fire escape planning and practice.

Only one-third of Americans have both developed and practiced a home fire escape plan. And of the three-quarters of Americans who do have an escape plan, less than half actually practiced it. As we saw in the scenario above, fire is unpredictable. Seconds and minutes can mean the difference between life and death. We want to ensure that area residents know what to do if a fire breaks out in their home. Preparation is an important part of being able to deal with an emergency and it is crucial you take steps to prepare your family for the potential of a home fire by having an escape plan and practicing it.

Although preparing for the unexpected is difficult, reviewing the information below and taking action based on it to plan for a fire could save lives. NFPA rec-

ommends the following tips for planning your family's escape:

If you have children and want to make this a family activity:

- Make a map of your home. Mark a door and a window that can be used to get out of every room.
- Choose a meeting place outside in front of your home. This is where everyone can meet once they've escaped. Draw a picture of your outside meeting place on your escape plan.
- Write the emergency telephone number for the fire department on your escape plan.
- Sound the smoke alarm and practice your escape drill with everyone living in your home.
- Keep your escape plan on the refrigerator and practice the drill twice a year or whenever anyone in your home celebrates a birthday.

If your family is all adults:

- Walk through your home and identify two ways out of each room.
- Choose a meeting place outside in front of your home.



Van Cise

This is where everyone can meet once they've escaped.

- Make sure everyone knows the emergency number for your local fire department.
- Practice your escape drill twice a year.

The need to know two ways out doesn't only apply at home. Escape routes can become blocked by fire no matter where you are. Whether you are at work, dining out, shopping, or staying at a hotel you should always have a secondary escape plan.

To learn more about "Have 2 Ways Out" visit NFPA's website at www.firepreventionweek.org or contact the AEDC Fire Prevention Office at 454-5643.

Donations needed for annual AEDC VA picnic

By Raquel March
ATA Public Affairs

Arnold Engineering Development Complex's (AEDC) annual Veterans Affairs (VA) picnic is Oct. 4, 11 a.m. to 1 p.m., at the Arnold Lakeside Center and coordinators are encouraging the local community to provide donations.

The veterans attending the picnic are residents of the VA Tennessee Valley Healthcare System in Murfreesboro.

"Many veterans don't have a lot of family who support them and they live off of a small amount of money given to them monthly," said Mike Niederhauser, Arnold Community Council community relations/public service chairman. "The only time they get new clothes, new underwear, new socks or toothpaste is when our community comes together and gets these things for them."

Packages with donated items will be given to the veterans attending the picnic. Approved items for donation include: ball caps, sunglasses, t-shirts, socks (crew, not tube), shampoo, soap, deodorant, toothpaste, toothbrushes, combs, travel cups with lids, pens, stationary, phone cards and small décor items for their personal bulletin boards or doors.

Items that should not be donated are mouthwash, razors, hard candy, and fresh fruit, anything with company logos relating to alcohol, anything containing alcohol and nothing glass.

Donations may be delivered to the local chambers of commerce in Winchester, Tullahoma and Manchester by Monday, Oct. 1.

"It [donations] gives the vets that come something to take with them and remember the days of being in the military because it's their day," said Master Sgt. Randall Lusk, AEDC VA picnic coordinator. "Some of the donations are little things, but it isn't like the vets can leave the hospital and go to Wal-Mart and pick up what they want."

For more information, contact Lusk at (931) 454-4799.

AIA-NDIA STEM Summit at UTSI and AEDC



AEDC and University of Tennessee Space Institute (UTSI) jointly hosted a conference of 100 educators, government, business and community leaders Sept. 4-6. The Aerospace Industries Association (AIA) and National Defense Industrial Association (NDIA) STEM (Science, Technology, Engineering and Math) Summit is a quarterly event held in a different state each time. This group discussed ways to address the future shortage of technical personnel. The event began at UTSI and then moved to the Gossick Leadership Center (GLC). National education experts and top aerospace companies (Lockheed Martin, Northrop Grumman, Boeing to name a few) tackled some tough issues, such as delivering STEM excellence to rural communities, improving STEM training for teachers, making STEM more interesting and attractive to students, capturing best practices and the economic impact of a shortage of technical workers. The event closed at the Arnold Lakeside Center with a presentation from the Deputy Commissioner of the Tennessee Department of Education, Dr. Kathleen Airhart. A small group stayed for a tour of AEDC. (Photo by Jackie Cowan)

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article and give AFRL/RDLE more flexibility during testing.

"If we couldn't open it up, they would have been limited in target installation, aim points and instrumentation, so we opened up the gap," Hausman said. "It exposed more of the test article and just gave them more flexibility with their objectives."

In order to ensure the flow wouldn't be affected, AEDC engineers simulated it on a computer with a larger gap between the nozzle and diffuser for predictions on how the flow would work.

"We completed CFD (computational fluid dynamics) to make sure that we did not have any spillage into the test cell or anything that would affect the test," said Dusty Vaughn, ATA's APTU project manager.

The work of integrating so much equipment into the tunnel was complex but worked out well, according to Ulibarri.

"I would say it was fairly complex, but it fell together pretty rapidly," he said. "Within the course of a couple of weeks we were up and running."

Preparations for the test involved more than facility modifications. Ulibarri said the program has been in discussions for two years, and AFRL looked at lessons learned from

a 2009 test they ran in the von Kármán Gas Dynamics Facility's Tunnel C as well as some risk reduction efforts before coming back to AEDC.

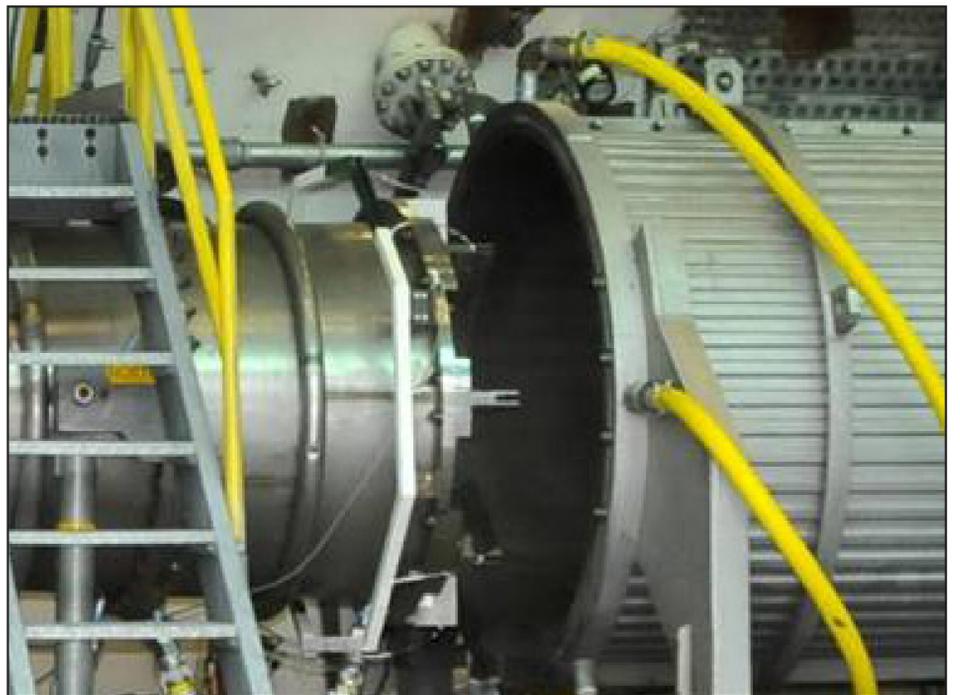
"We kind of knew what risks were coming up, and we learned how to reduce that risk pretty well," he said.

AFRL met with AEDC in August to talk about a plan. The team held a Technical Review Board in October to discuss the test, and APTU workers conducted a series of risk reduction runs in December.

"We went and revisited some things offline from the customer and re-engaged in April," Hausman said. "We did the risk reduction runs in April to everyone's satisfaction, and then we went in with the start date and progressed on to testing. So it wasn't overnight that all these changes were made. It was realized over time."

Meanwhile, preparations were also underway at Kirtland among the organizations that would come from there to AEDC for the test: AFRL, Boeing and Ball Aerospace. Even though three groups were joining together to work with a fourth at AEDC, Ulibarri said the integration couldn't have been much smoother.

"I don't think we could have done it without the support of our ATA guys," he said.



Before modification for the Air Force Research Laboratory's testing involving laser effects on materials, the gap between the AEDC Aerodynamic and Propulsion Test Unit's diffuser and nozzle was 17 inches. (Photo provided)

"The beauty of it is I think we integrate into a single team. They've been here to support us."

Ulibarri expects a larger matrix of test data than AFRL originally hoped for to come from the testing, and he hopes they will be back at AEDC for more in the future. He said the information they're gathering will go toward finding uses for directed energy in the future.

"There are several AoAs (Analysis of Alternative) coming out," Ulibarri said. "The next-gen fighter is one of them, and directed energy is looking for a spot in that. We'll try and convince the warfighter that directed energy is mature enough to be in the game, and this test is going to help provide some answers to that – to show proof that HEL systems can be ready in time for integration."

Do your part – Please recycle this paper after reading!

Arnold Air Force Base's Visitor's Center will have limited capabilities in October

By Philip Lorenz III
ATA Public Affairs

There will be a minor construction project taking place from Oct. 17 – 22 that will reduce or eliminate some of the Arnold Engineering Development Complex's (AEDC) Visitor Center services during that timeframe.

This will have a direct impact on base employees, official visitors and the area's military retirees and their dependents.

The Visitor Center will undergo a minor remodeling/reconfiguration project and some of the computer systems will be disconnected for several days, according to Dan Hawkins, AEDC's installation security section manager.

"We ask patrons in need of military ID card services during this time to defer

their request until after the construction is complete since the equipment required for this service will remain in the construction zone," Hawkins said. "Emergencies will be handled on a case-by-case basis."

Visitors coming to the base on official business will receive credentials from a temporary trailer set up in the parking lot. This service will be very limited and only pre-made credentials can be issued during this timeframe.

Sponsors who have visitors coming for multiple-day visits during this timeframe can eliminate the need for multiple trips to the Visitor Center by advising the Visitor Center of the visit no later than Oct. 10.

This advance notice will allow time for multiple-day

badges to be made. These formal visit requests must be made either in person or by using the portal visitor form at <https://ata.arnold.af.mil/visitorRequest/>.

"If we have the information in advance, we will make non-photo IDs to cover the duration of the visit," Hawkins said. "We will have pre-made, single-day badges for visitors who arrive on short notice, but they will only be good for the day of issue. Visitors coming for multiple days will have to make repeat visits to the Visitor Center if a non-photo badge is not made in advance."

"We appreciate everyone's patience during this time."

For additional information, please call Hawkins at 931-454-5504.

Flu shots to be available for civilians as well as military

WRIGHT-PATTERSON AIR FORCE BASE, Ohio - For the second year in a row, Air Force Materiel Command will make the influenza (flu) vaccine available to its civilian workforce. This is in addition to the flu vaccine for military and TRICARE beneficiaries.

There is a limited quantity of the flu vaccine pur-

chased for the AFMC Civilian Workforce Flu Immunization Program. The vaccine will be available on a first-come, first-serve basis to all government civilian workers. As a reminder, the flu vaccine remains mandatory for military personnel.

Being immunized can help protect you, as well as your family and co-workers, from getting the

flu. While the severity and timing of the annual flu outbreak can be unpredictable, getting immunized early will provide protection for the entire season.

The best way to prevent influenza is to get a flu shot this fall. Convenient shot-line locations and times will be announced soon through your local Military Treatment Facility.



Staff Sgt. Salvatore DiGiacomo participates in Air Force Week in New York City, Aug. 21, 2012. DiGiacomo demonstrates the explosive ordnance disposal operational equipment to the public. He is stationed with the 514th Civil Engineer Squad at Joint Base McGuire-Dix-Lakehurst, N.J. (U.S. Air Force photo/Master Sgt. Jeremy Lock)

'Preparedness Month' a year-round responsibility

By John Burt
AFCE Support Agency

TYNDALL AIR FORCE BASE, Fla. (AFNS) -- With September designated as National Preparedness Month, Air Force Emergency Management experts are emphasizing the tools available to help Airmen and their families "Be Ready."

National Preparedness Month is an annual campaign to raise awareness on the importance of disaster preparedness. The event was instituted by the Federal Emergency Management Agency and the Department of Homeland Security a year after the devastating events of 9/11.

With a theme of "Pledge to Prepare: Awareness to Action," the goal of this year's commemoration is to encourage all Americans to take specific steps to be prepared for all kinds of disasters and emergencies.

The message of personal readiness is one that Airmen should heed year round, according to Air Force emer-

gency managers.

"National Preparedness Month is a FEMA-sponsored event," said Mike Connors, the Air Force emergency manager. "The Air Force has its 'Be Ready' initiative, which is a year-round campaign that dovetails nicely into that. Between the two campaigns, it helps raise awareness and prompts people to take action to be prepared for whatever the threat."

Air Force emergency managers are trained to support base communities by preventing, preparing for, responding to and recovering from emergencies. This includes educating base members on what to do if they encounter a hazard, whether it's a natural disaster or man-made incident such as a major accident or terrorist attack.

"One of the first things Airmen should know is where their installation's emergency management office is," Connors said. "The installation emergency management office is the

place to go for emergency information. The EM staff has the expertise to provide you the knowledge and materials you need to be prepared."

Emergency managers recommend some basic steps Airmen should take now that could make a big difference in the event of a disaster.

"Three things that we constantly stress to our Airmen is (to) get a kit, make a plan and be prepared," said Master Sgt. Ernie Rude, NCO in charge for Air Force emergency management integration. "If every Airman will take these steps, effects from disasters can be minimized and lives can be saved."

Rude said there is a comprehensive set of resources available on the Air Force's "Be Ready" website.

For more information and resources to help prepare for any disaster, Air Force members should contact their installation emergency management office or visit <http://www.BeReady.af.mil>.

Don't TXT n DRV

Air Force officials describe ICBM way-ahead

By 1st Lt. Ashleigh Peck

Air Force District of Washington Public Affairs

WASHINGTON (AFNS) - As intercontinental ballistic missiles gain prominence in the Air Force's nuclear enterprise, service officials related the importance of maintaining the system during the 2012 Air Force Association Air and Space Conference and Technology Exposition here Sept. 18.

Panelists included Maj. Gen. William Chambers, assistant chief of staff for strategic deterrence and

nuclear integration; retired Lt. Gen. Frank Klotz, senior fellow for strategic studies and arms control council on foreign relations; and Elbridge Colby, global strategic affairs principal analyst, CNA.

"The ICBM is stabilizing, lethal, responsive, survivable and highly credible," Chambers said, adding that he sees ICBM as a homeland-based force that maintains strategic stability and supports conflict resolution below the

nuclear threshold.

"It does this by imposing great costs on any would-be aggressor and denying any adversary a nuclear coercion option," he explained.

Chambers also noted that ICBMs are among the most reliable and inexpensive strategic systems to operate and maintain.

"In fiscal year 2011, the Air Force provided an ICBM capability to the nation for one percent of the overall Air Force budget," Chambers said. "That's not a lot of money for the

overall global stability that this force provides America."

While some advocates of deep reductions have called for total elimination of ICBM, the panel assured that the ICBM is essential to deterrence and strategic stability.

"If the ICBM were eliminated, the number of strategic targets an adversary would have to attack to seriously undermine or even destroy the U.S. nuclear deterrent force would be reduced from more than 500 to perhaps

a dozen," Klotz said.

The panel underscored the importance of maintaining the ICBM in the 21st century.

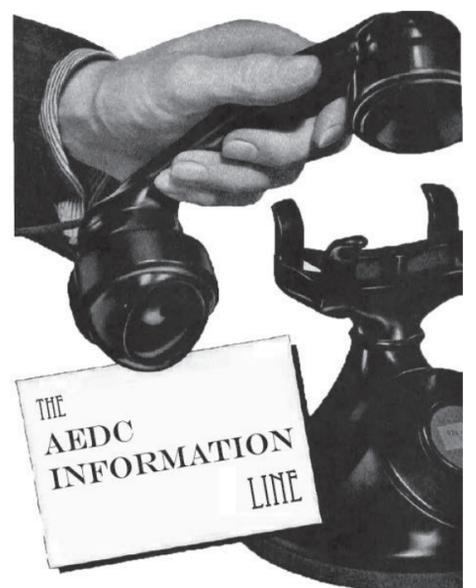
"It's very important to think about new capabilities and maintaining the same fundamental approach to deterrence - putting the fear into your opponent so you don't ever have to go to war," Colby said.

The panelists acknowledged that though opinions may vary about ICBM's future, the system must continue to progress.

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454-3600

The AEDC Information Line is available for ATA employees to get the latest information on a wide variety of emergency circumstances that could impact base operations or driving conditions.



Vandenberg launch unit 'small squadron with big responsibilities'

By Jennifer Green-Lanchoney
30th Space Wing Public Affairs

VANDENBERG AIR FORCE BASE, Calif. (AFNS) - 3...2...1... and we have lift off.

Members of the 4th Space Launch Squadron (SLS) know the feeling of launch day excitement and stress and are currently preparing to get revved up again for the Atlas V launch scheduled for Sept. 13.

"We are a small squadron," said Maj. Joseph Howerton, 4th SLS Atlas V flight commander. "But we have big responsibilities."

The 4th SLS executes Western Range Evolved

Expendable Launch Vehicle spacelift operations with a combined team of engineers, space operators, program managers and missile assurance technicians.

"Any time someone is touching the rocket we have to have a mission assurance technician from the 4th SLS out there observing operations," said Howerton. "Mission assurance technicians have missile maintenance backgrounds, so they have the hands-on experience to know what to look for."

Airmen are currently

engaged in preparations for the Atlas V rocket carrying a National Reconnaissance Office payload into orbit from Space Launch Complex-3 here.

"We are looking good (for launch) from a launch vehicle perspective," said Howerton. "This is one of the cleanest launch vehicles we have seen for Atlas; we have not seen any major issues."

This will be the fifth Atlas V mission for Vandenberg, and Howerton's second mission as the Atlas V flight commander.

"Before launch I have Airmen out at the pad

watching the corners of the mobile service tower during roll back," said Howerton. "They are watching the sides of the tower to ensure it is not hitting the launch vehicle, and if anything happens they can troubleshoot."

Technicians from the 4th SLS provide over-the-shoulder support to United Launch Alliance launch contractors on Delta and Atlas flight vehicles.

"On the day of launch we make sure all the preparations are completed on the pad," said Tech. Sgt. Jessie Carter, 4th SLS mission assurance technician. "We

roll the building back, clear the site and then they fuel the rocket up while we stay back at a safe distance."

The Atlas V launch vehicle is a medium-sized vehicle and can lift up to 30,000 pounds to orbit.

"I think the most exciting part is actually just seeing (the rocket) go," said Carter. "When it gets about half way over the tower you can feel the reverberations from the sound; it is just so loud, amazing and bright."

According to Howerton, the Atlas V launch vehicle currently has a 100 percent success rating.

"The Atlas V has an ex-

cellent track record and excellent reliability," said Howerton.

Howerton recognizes how the 4th SLS plays a key role in assuring access to space for the joint force and our nation.

"Not many people understand the details of what we do in the 4th. It's kind of cool," said Howerton.

"I have a younger brother in the Navy, so the satellites we are launching could somehow protect him and make sure that he doesn't accidentally get put in harm's way. I mean that kind of thing makes me feel pretty good."

Alaska Reserve F-22 unit becomes fully operational

By Capt. Ashley Conner

477th Fighter Group Public Affairs

JOINT BASE ELMENDORF-RICHARDSON, Alaska (AFNS) - The 477th Fighter Group here reached a readiness milestone Sept. 9 when Col. Bryan Radliff, 477th FG commander, announced that the group had achieved fully operational capable status.

"Fully operation capable means that we are ready and able to execute our wartime tasking," said Radliff. "With our combined unit inspection successfully completed, our manning sufficient to meet our (unit type code) taskings, programs such as Key Spouse to support our families, an honorary commander to support our community and employer relationships, I am proud to declare the 477th Fighter Group fully operational capable."

The 477th FG was reactivated here October 2007 when the group became the Air Force Reserve Command's first F-22 Raptor

unit and the only Air Force Reserve unit in Alaska. In September 2008, the 477th FG along with the active duty 3rd Wing declared initial operating capability.

The group's heritage can be traced back to the 477th Bombardment Group, a Tuskegee unit that didn't have the opportunity to become fully operational capable. The 477th BG patch also wasn't officially recognized by the Air Force until July of this year when former Air Force Chief of Staff Gen. Norton Schwartz simultaneously recognized and retired the patch.

"With the (Tuskegee Airmen) historical perspective in mind, I hope you can appreciate why recognizing (the fully operational capability) of the 477th is an important milestone, not only for us and our ability to serve the nation, but for the Tuskegee Airmen who were denied the opportunity," said Radliff. "We serve proudly to honor them."

F-35A reaches 100th sortie milestone at Eglin



A maintainer secures the chocks on the wheel of an F-35A Lightning II Joint Strike Fighter after its sortie at Eglin Air Force Base, Fla., Aug. 16. The sortie marked the 100th F-35A mission flown at Eglin. The Air Force and Marine Corps pilots accomplish morning and afternoon sorties every day, depending on the weather. Together, the A and B variant F-35 pilots have flown almost 200 sorties at Eglin. (U.S. Air Force photo/Samuel King Jr.)

High School receives CyberPatriot V laptops from AEDC representatives

By Raquel March
ATA Public Affairs

Representatives from Arnold Engineering Development Complex's (AEDC) Science, Technology, Engineering and Mathematics (STEM) center recently visited the Coffee County Central High School Air Force Junior ROTC (AFJROTC) to loan CyberPatriot V laptops for their CyberPatriot V team.

CyberPatriot V is a national high school cyber defense competition created to inspire high school students toward careers in cybersecurity or other STEM disciplines critical

to the nation's future.

AEDC's STEM center is a sponsor for the high school's CyberPatriot V team. Michael Glennon, AEDC engineering and technical management director, and Cameron Liner, AEDC aeropropulsion test information systems manager, are mentors for the team providing knowledge of computer operating systems (OS) and network vulnerabilities.

"The CyberPatriot program will provide training in OS configurations for cadets to practice fix-



Representatives from Arnold Engineering Development Complex's (AEDC) Science, Technology, Engineering and Mathematics (STEM) center recently loaned CyberPatriot V laptops to the Coffee County Central High School (CCCHS) Air Force Junior ROTC (AFJROTC) CyberPatriot V team. Pictured left to right is Jere Matty, AEDC STEM Educational Outreach Specialist; Angela Gribble, CCCHS vice principal; Lt. Col. Philip Bailey, CCCHS AFJROTC Senior Aerospace Science Instructor; Cadet Maj. Kevin Kaufman, CCCHS AFJROTC corps commander; Cameron Liner, AEDC CyberPatriot V mentor; Cadet 1st Lt. Billy Nippers, CCCHS AFJROTC deputy corps commander; and Michael Glennon, AEDC CyberPatriot V mentor. (photo provided)

ing vulnerabilities in the month of October," Glennon said. "Competition will begin in November with state AFJROTC units."

During competitions

students are provided one to three virtual machines. The machines contain several vulnerabilities that students must identify and defend against.

CyberPatriot V was es-

established by the Air Force Association. The Northrop Grumman Foundation is the presenting sponsor for the fifth phase of the program, CyberPatriot V. The organizations founding

partners are the Science Applications International Corporation (SAIC) and the Center for Infrastructure Assurance & Security (CIAS) at the University of Texas-San Antonio.

AIA-NDIA STEM Summit Youth



The L&N Science, Technology, Engineering and Mathematics (STEM) Academy and Hardin Valley STEM Academy of Knoxville, Tenn. recently toured Arnold Engineering Development Complex (AEDC) while attending the National Defense Industrial Association (NDIA) STEM Workforce Seminar at the University of Tennessee Space Institute. Capt. John Dayton (far right), AEDC's Turbine Engine Ground Test facility operations officer, spoke with students about the Air Force and skills needed for his tasks in aeropropulsion testing. Students toured a space chamber, the Propulsion Wind Tunnel and the Aeropropulsion Systems Test Facility turbine engine test cell. They also participated in a paper airplane demonstration. (photo by Jackie Cowan)

Iraqi air force F-16 training takes off in Arizona

By Maj. Gabe Johnson
162nd Fighter Wing Public Affairs

TUCSON, Ariz. (AFNS) - While the Republic of Iraq anticipates an initial delivery of F-16 Fighting Falcons in September 2014, the pilots who will fly them embark on a historic partnership with the Arizona Air National Guard's 162nd Fighter Wing here to learn how to fly the multipurpose fighter.

Already, two Iraqis have joined aspiring fighter pilots from the United States, Singapore, Poland, Denmark, Japan and the Netherlands at the U.S. Air Force's international F-16 schoolhouse at Tucson International Airport. A delegation of senior Iraqi Air Force officers visited the unit Aug. 30 to assess their students' progress and reaffirm their partnership with the desert fighter wing.

"We have an opportunity to work with a critical partner in a very strategic region of world," said Col. Mick McGuire, 162nd Fighter Wing commander. "They have an opportunity to see what a professional operation we are and as a result of their visit I think

we'll have a long-standing relationship with the Iraqi air force - at least through 2020 - training F-16 pilots and providing a true coalition warfighting partner for the United States and an ability for them to defend their country for years to come."

In 1986, Iraqi air force Brig. Gen. Abdulhusein Lafta Ali Ali flew Soviet-era MiG-21s but said he dreamed of flying the F-16.

Now visiting Tucson as a senior officer in his air force's operations directorate, he flew with American pilots to experience the F-16's capabilities and the unique demands of U.S. fighter training.

"The F-16 project is most important for our two nations," he said. "This is the first time Iraqis have flown F-16s. It's important for us to understand the training schedule and syllabus for our student pilots because the first pilots who train here will one day be examples for our other pilots."

After his orientation flight, Abdulhusein noted the F-16's high thrust to weight ratio, maneuver-

ability, aerodynamic shape, avionics, load capacity, and its design which allows pilots to better endure G forces.

"We reached more than 7 Gs during our flight, and the (tilt-back) angle of the seat made it easy. In the MiG-21 the seat is more vertical making G forces difficult," he said. "This is the best aircraft for us and this is the best place for our pilots to train."

Air Guardsmen here train more than 70 international student pilots per year, offering several training programs that range from initial F-16 training to qualify new pilots to an advanced weapons course. Under the current contract between the U.S. and Iraq, the 162nd FW will train a total of 27 Iraqi pilots.

Until they receive their own fighters, the initial cadre of pilots will remain in Tucson. After they complete the six-to-eight month basic course they will continue through flight lead upgrade training, additional seasoning and instructor pilot certification.

According to McGuire, a tailored syllabus is among several factors that



Col. Andrew MacDonald helps Iraqi air force Brig. Gen. Abdulhusein Lafta Ali Ali buckle into an F-16D Fighting Falcon before an orientation flight at Tucson International Airport, Aug. 30, 2012. MacDonald is the 162nd Operations Group commander. Abdulhusein, with a delegation of senior Iraqi officers, visited the international F-16 training wing where Iraqi pilots are learning to fly the multirole fighter. (U.S. Air Force photo/Maj. Gabe Johnson)

make the wing an attractive option for international fighter pilot training.

"First and foremost, the 162nd (FW) has an unparalleled safety record because our maintainers average 18 years of experience specializing on the F-16," said the colonel. "That instills confidence in the nations we train."

Adding to the secure feeling of flying aircraft from one of the safest F-16 fleets in the world is the freedom afforded by Arizona's plentiful ranges, he said.

The Barry Goldwater Range in southwest Ari-

Forest Service deactivates C-130 firefighting operations

CHEYENNE, Wyo. (AFNS) - The U.S. Forest Service has deactivated the Modular Airborne Fire Fighting System-equipped military C-130 Hercules as fire conditions in the West have improved.

The 153rd Air Expeditionary Group received the notification late Sept. 14, releasing the two MAFFS planes and crews that were still operating, as well as the associated support and maintenance staff. All crews have reported back to their home stations.

The California Air National Guard's 146th Airlift Wing, and the North Carolina Air National Guard's 145th Airlift Wing each had a C-130 operating out of McClellan Air Tanker Base, Calif., for the last few weeks.

On Sept. 2, two C-130s from the Wyoming Air National Guard's 153rd Airlift Wing were released from MAFFS operations in Boise,

Idaho. Two C-130s from the Air Force Reserve Command's 302nd Airlift Wing were released from duty Sept. 7.

"Although our planes and crews have returned home, we all know MAFFS can still be reactivated well into the fall," said Air Force Lt. Col. Donald Taylor, 153rd Air Expeditionary Group acting commander. "We have had a very busy season and know it's still too early to say the season is over for good."

According to 153rd Air Expeditionary Group officials based in Boise, Idaho, this season has become the second-highest in MAFFS history for gallons of fire retardant dropped, surpassed only by the MAFFS season of 1994 when about 5 million gallons were dropped. This season, through Sept. 14, the MAFFS fleet released almost 2.5 million gallons of fire retardant during 1,011 drops on fires in 10 states.

zona consists of 2.7 million acres of relatively undisturbed Sonoran desert. Overhead are 57,000 cubic miles of airspace where fighter pilots can practice air-to-air maneuvers and engage simulated battlefield targets on the ground.

"Finally, we average 17,000 flying hours per year, and we're able to do that because of Arizona's year-round flying weather. Less than 3 percent of scheduled sorties here are canceled due to weather," he said.

The elements add up to optimal flight-training conditions which allow the

wing's cadre of 80 instructor pilots to execute an aggressive training schedule.

"The students get the best possible flight education when they come here," said McGuire, "and our Airmen take great pride in their mission - they see the big picture."

"Partnership building it's about flying together, operating together and training together, so if we have to, we can fight together. On a deeper level, it's about friendships. With F-16s in operation around the world, creating the foundation of a relationship is absolutely invaluable."

Local Air Force Sergeants Association honors all Airman with annual bike-a-thon at AEDC

By Philip Lorenz III
ATA Public Affairs

Arnold Engineering Development Complex (AEDC) was recently the site for the Air Force Sergeants Association (AFSA) Chapter 477's hosting of their third and most successful annual bike-a-thon to raise funds for projects that include a number of quality-of-life initiatives.

"This year's event was met with unprecedented support from all across AEDC, breaking our record for funds raised by exceeding \$2,700," said Donna Paredez, a data analyst for AEDC's Test Systems Sustainment Division for Integration and Support, and senior advisor for AFSA Chapter 477. "Special appreciation goes out to our riders and the folks at our Precision Measurement Equipment Laboratory (PMEL), Operations Center, Model Shop, and Test Operations Division for their generous donations."

Paredez is also one of the

founders of the bike-a-thon.

Nineteen employees at AEDC took part in the bike-a-thon, which formally began in 2010 to honor the memory of Tech. Sgt. Gene Jobe, a 21-year career Air Force member and the late father-in-law of former AEDC Chaplain, Maj. Paul Gunn.

The event takes place at Arnold AFB every year.

Gunn, who is a chaplain recruiter for the Air Force Reserve Command, has participated in all of the bike-a-thons. He said the reasons for the event are just as relevant as the day he and the AFSA Chapter 477 spearheaded the organizational effort for the first bike-a-thon in 2009.

"To me, Gene [Jobe] represents the Airman who goes to work every day and serves his country with honor," Gunn said.

Paredez said she, Tech Sgt. Michael Hurley, the AFSA vice president, and Gunn share that conviction.

"Although we decided to



Arnold AFB Commander Col. Ray Toth fired the starting pistol for 19 cyclists who participated in the third annual bike-a-thon to honor the memory of Tech. Sgt. Gene Jobe, a 21-year career Air Force member and the late father-in-law of former AEDC chaplain, Maj. Paul Gunn. Many of the cyclists, all of whom work at the base's Arnold Engineering Development Complex, have participated in all or most of the previous bike-a-thons since its inception in 2009. (Photo by Jacqueline Cowan)

call the annual event "The Tech Sgt. Gene Jobe Memorial Bike-A-Thon," it is really dedicated to those veterans who, like Gene, were not

war heroes. He was an Airman who dedicated more than 20 years of his life to his country. He represents all the hard-working Airman

who go to work every day and serve their country with honor."

AFSA is a non-profit organization that represents the

professional and personal interests of more than 130,000 active, retired and veteran enlisted members of the U.S. Air Force and their families.

Wounded warriors discuss transitions to new lives

By Lisa Daniel

American Forces Press Service

WASHINGTON (AFPS) - Caregivers, National Guard and Reserve support and sports for the wounded are the top Defense Department priorities for wounded warriors and their families, the deputy assistant secretary of defense for warrior care said here Sept. 13.

John R. Campbell made the comments after listening to wounded warrior panelists discuss their experiences with recovery at the annual Warrior-Family Symposium, sponsored by the Military Officers Association of America.

The panel included four wounded warriors who spoke about their transitions to a new life after being wounded in battle. Retired Air Force Tech. Sgt. Matthew Slaydon and his wife, Annette, were both part of the panel. Slaydon was an ordnance disposal technician on his third deployment in Iraq in October 2007 when a roadside bomb exploded in his face. Slaydon said he received excellent medical treatment, but struggled after returning home from the hospital. Family members didn't understand the symptoms of post-traumatic stress, he said, and some relationships, including with his mother, ended.

Slaydon, who lost his arm and was blinded by the bomb, said his symptoms worsened after he received a medical retirement from the service. He became paranoid, he said, at noises in his house and would spend his days ter-

rified and sitting with his guns.

Slaydon said he has had a wonderful caregiver in his wife, an Air Force recovery care coordinator. Still, the ongoing stress of recovery and caregiving weighed on the couple, and they separated even though Slaydon said he still loved her, but that he needed to recover on his own.

"There's no handbook that says when you should pull back as a caregiver and give them more independence," Annette Slaydon said. "There is no instruction booklet about how to move forward on this."

Turning to Campbell, and with the preface of an apology, Mrs. Slaydon said, "There are some really big holes that need to be filled either by the government or the private sector or both to give our families a chance."

"It's OK, I need to hear this," Campbell replied.

Retired Marine Corps Master Sgt. William "Spanky" Gibson moderated the panel, along with retired Marine Corps Col. Derek Donovan, vice president of the Fisher House Foundation. Gibson was a 35-year-old gunnery sergeant in Iraq in 2006 when he was shot through the knee. His left leg was amputated above the knee, but he started competing in triathlons while recuperating at Brooke Army Medical Center in San Antonio and has competed in more than a dozen races. In 2008, he

went back to Iraq as the first above-the-knee amputee to return to a ground combat area of operations.

Gibson's determination showed up early in his recovery, when he proved he could get himself to the second floor of a Fisher House room -- the only one available -- rather than stay in the hospital. "I went up and down those stairs for two hours, sweating profusely, just to prove I could do it," he said.

Another panelist, retired Navy Petty Officer Benjamin Host, was with the Seabees in Iraq in 2004 when he suffered a severe traumatic brain injury and post-traumatic stress disorder after being in a Humvee convoy accident. Host said he received "exquisite" military medical care that included three brain surgeries and repairing his fractured skull. But, he said, "it's the in-between area where we get a drop-off" meaning a lack of oversight in the recovery process.

Although it took a legal battle, Host said, he was medically retired from the Navy earlier this year.

Campbell and the audience also heard from Dr. Tara Dixon, a trauma and critical-care surgeon who deployed to Iraq as an Army reservist with a forward-deployed unit in 2008 and 2010. Dixon recalled the stress of "routine bombings" on her camp, of treating "the guy I had breakfast with that morning" for critical injuries, and of having to make split-second

decisions about whether to amputate a limb or risk transporting a soldier hours away to a Baghdad hospital.

Then there were the abused Iraqi children brought in as decoys for insurgent attacks on the unit and the surprising number of female soldiers who needed treatment for sexual assaults -- crimes she was legally bound not to report at the victims' request, she said.

"It messes with your mind a bit," Dixon said of her time in Iraq. She described through tears the toll her service took, which culminated in a suicide attempt six months after her redeployment.

Among the many problems, Dixon said, was returning to a city without a military base and no means of support. "I was very much an outcast, and I felt very much alone," she said.

Campbell, a former bank executive who started MyVetNetwork, said he started the online social network to add meaning to his work. In doing so, he said, "I heard the voice of my mother," who was his caretaker after he was injured twice as a platoon commander in the Vietnam War.

"I've been worried and concerned for a while about caregivers," he said,

adding that his office will host a conference early next year about how to help them.

On the Guard and Reserve, he said, "They don't have a base, they don't have the community. They're alone and they need our help."

Campbell said he

wants to continue to explore the issues that most affect wounded warriors and their families and get them the help they need.

He said he believes in public-private-nonprofit partnerships. "There's this mindset that (the government) can do it all, but it can't," he said.

An Air Force Future



Could three-year-old Isabella Craig be thinking about a future career in the Air Force? Her dad says she loves the tattoo; the Air Force emblem is a tattoo on her arm that should last for about a week. Isabella is the daughter of Ben and Lana Craig of Shelbyville. Ben Craig is the incoming vice president for Arnold Community Council, the community support group for AEDC.

F-35B completes first airborne engine start tests

EDWARDS AIR FORCE BASE, Calif. – The short take-off and vertical landing variant of the F-35 Lightning II Joint Strike Fighter successfully completed a major prerequisite test for in-flight performance Aug. 15.

BF-2 completed the first air starts, which test the ability of the F-35's propulsion system to restart during flight. Verifying the restart capability of the propulsion system is part of the initial flight test program for the F-35 and a prerequisite for high angle-of-attack testing, scheduled to start next year.

"High alpha, or angle-of-attack, tests are impor-

tant for us to fully evaluate the aircraft's handling characteristics and warfighting capability," said Marine Corps test pilot Lt. Col. Matthew Kelly. "Maximizing the performance of the airplane around the very slow edges of the flight envelope is probably some of the most challenging testing we will conduct. After we get through it, we'll know a lot more about how this aircraft will perform during combat within visual range."

Using multiple restart methods during the tests, BF-2 successfully completed 27 air starts at various altitudes.

To execute air start test-

ing, the F-35 Integrated Test Force at Naval Air Station Patuxent River ferried BF-2 and an F/A-18 chase aircraft from Air Test and Evaluation Squadron (VX) 23 to the F-35A testing facility at Edwards AFB.

"At Edwards, we have a unique testing range, which provides ideal and controlled conditions for completing air start testing. The Edwards range is comprised of 20,000 square miles of airspace, and has 65 linear miles of useable landing area on Rogers and Rosamond Dry Lakes, if required during engine out testing," said Lt. Col. George

N. Schwartz, commander of the 461st Flight Test Squadron and Government Site Director. "In addition, we've recently completed air start testing on the F-35A, so we're able to share some of our expertise with the Pax team as well."

The core of the F-35B's propulsion system is the F135 engine, capable of more than 40,000 pounds of thrust.

"The F135 continues to power a successful flight test program," said Roy Hauck, Pratt & Whitney site lead at the F-35 Patuxent River ITF. "The aircraft and its integrated systems demonstrated intentional flameout and successful

recovery scenarios during air start flight tests, and BF-2 and the team did a great job."

A team of approximately 60 ITF and VX-23 personnel provided engineering and maintenance requirements for the events.

The detachment to Edwards from NAS Patuxent River overlapped with a busy summer flight testing schedule.

"In the past two months, we've sent detachments to Edwards and Lakehurst [N.J.], and maintained a full-tempo test schedule here," said Navy Capt. Erik Etz, director of test for F-35 naval variants at NAS Patuxent River.

"The team of military, government and industry personnel rallied to make all the events happen, and they can be proud of their accomplishments."

The F-35B is the variant of the Joint Strike Fighter designed for use by U.S. Marine Corps, as well as F-35 international partners in the United Kingdom and Italy. The F-35B is capable of short take-offs and vertical landings to provide air power from amphibious ships, ski jump aircraft carriers and expeditionary airfields. The F-35B is undergoing test and evaluation at NAS Patuxent River prior to delivery to the fleet.

Academy solar panels save taxpayers \$800K in first year

By Amber Baillie

Academy Spirit staff writer

U.S. AIR FORCE ACADEMY, Colo. - After a year of operation, the data is in. The Academy has received roughly seven and half percent more power than anticipated from the 6-megawatt solar array project that began production last summer.

A total of 18,888 solar panels were installed along 41 acres on the Academy's southeast corner and began operation for renewable energy on July 1, 2011. Since then, the project has provided the Academy 12.5 million kilowatt hours in power when it was originally estimated to provide only 11.6 million kilowatt hours in power.

"The project is finished and now we're reaping the benefits from it," said Russell Hume, a mechanical engineer with the Academy's Directorate of Installations. "We're making sure it produces within a reasonable measure of what we anticipated and we're above what we predicted, so that's good news."

The \$18.3-million project was awarded to Colorado Springs Utilities who subcontracted to SunPower Corp. in August 2009 through funds from the American Recovery and Reinvestment Act. Also in 2009, the Academy was chosen as the net zero installation for the Air Force, and this project is one way the Academy has strived to meet the energy goals of the Defense Department's Net Zero Energy Installation initiative.

"The panels have produced 12 percent of the Academy's overall electricity needs," Hume said. "As we target net zero, electrical energy is relatively easy to produce, but thermal energy is much more of



The Air Force Academy's solar array, pictured here May 13, 2011, occupies 41 acres of land on the Academy's southeast corner, adjacent to Interstate 25. The array, which comprises 18,888 solar panels, produced 12.5 million kilowatt-hours of power since it was activated July 1, 2011. (U.S. Air Force photo)

a challenge. Our thermal load is currently met by natural gas and a renewable replacement fuel source for natural gas is very difficult to find."

In the first year of operation, the Academy has saved \$802,000 in avoided power purchases, Hume said.

"We estimated we would only save \$550,000 in direct power savings, so the \$802,000 is great news," he added.

The array uses Sunpower Corp.'s T0 tracker technology. The panels don't tilt to the south, like many fixed-axis arrays across the country, but rather remain flat and track the sun as it moves from east to west.

"The panels sit on top of long square tubes connected to motors that draw power directly from the panels and rotate the panels throughout the day. The degree of rotation is based on the normal weather cycle and where the sun should be based on astronomy."

Hume said the main driver of the project has been to save money and allow the Academy to refocus the money spent on utilities toward the direct mission, instead of mission support.

"In these fiscally austere times, we need to focus our resources on the mission.

So being green is great, but saving money is equally important" Hume said. "The great thing with energy, and projects like the array, is that it crosses operational and educational boundaries. I have been able to work closely with the Dean of Faculty and other staff to get cadets involved by showing them the solar array site. We want to expose cadets to solar energy so they can take it forward in their Air Force careers and apply it where necessary."

Hume said the Academy continues to take steps in the net zero initiative to meet the Air Force's desire to save on energy costs and meet legislative mandates.

Executive Order 13514 requires that all new federal buildings must be designed to achieve zero net energy by 2030 and after 2030, every building we create is supposed to be net zero, Hume said. Also, beginning in 2025 the National Defense Authorization Act of 2010 requires the Academy to either produce or purchase renewable energy totaling 25 percent of its total energy per year.

The economic life of the array is 30 years, Hume said.

Through Airmen's Eyes: HH-60 Pave Hawk Water Rescue

Unconventional repairs

WHITEMAN AIR FORCE BASE, Mo. (AFNS) - (This feature is part of the "Through Airmen's Eyes" series on AF.mil. These stories focus on a single Airman, highlighting their Air Force story.)

While on a deployment, everyone on base comes to realize how important every other job is because you can't do your job without the other shops doing theirs.

Tech. Sgt. Kenneth Wright, 509th Logistics Readiness Squadron vehicle maintenance low bay NCO in-charge, had an under-appreciated job that became much more appreciated while he was deployed to Afghanistan from June 2011 through March 2012.

Wright had many jobs during his deployment. He was one of three mechanics responsible for a fleet of 58 vehicles, and he was in charge of training and licensing all members of the team, both Army and Air Force, to operate vehicles on the base. He also managed the Army's vehicle tracking system.

Wright's mission while

deployed was similar to the one he has here at Whiteman, just with more intensity and constant threats from opposing forces.

"We had to keep the fleet up and rolling, providing the maximum amount of protection capable for the members leaving on outside the wire missions," Wright said. "I also provided security on many missions I went on, helping to ensure the safety of whoever was conducting the mission at the time, which is something I would never do while at Whiteman."

Every day was unique for Wright as his day-to-day duties were constantly changing. "If we had a morning mission we would be at work earlier getting our briefs," Wright said. "Otherwise we would head in and begin working on vehicles. We also conducted foot patrol from base to base providing security for key individuals."

One of the biggest difficulties Wright and his team had to face was the availability of parts. "A lot of the repairs we had to do were unconventional,



Tech. Sgt. Kenneth Wright takes part in a security patrol during his deployment to Afghanistan. Wright is assigned to the 509th Logistics Readiness Squadron as the vehicle maintenance low bay NCO in charge. Wright was deployed from June 2011 until March 2012. (Courtesy Photo)

or we would have to steal the parts off a vehicle that was hard broke," Wright said. "It was very difficult to receive the parts we needed out there."

According to Wright, while this was the best deployment he's been on, the fifth such deployment during his 12-year career, the one thing he missed the most was spending time with his children.

However, the friends he made on this deployment became part of his extended family.



An HH-60 Pave Hawk with the 41st Rescue Squadron at Moody Air Force Base, Ga., hoists up two pararescuemen during water training in the Gulf of Mexico on Aug. 14, 2012. The Pave Hawk has multiple ways to retrieve personnel from the land and sea. (U.S. Air Force photo/Staff Sgt. Joshua J. Garcia)

U.S. citizens overseas urged to vote

KADENA AIR BASE, Japan (AFNS) - With the 2012 national election less than 60 days away, Air Force officials are encouraging service members and U.S. citizens stationed overseas to request their absentee ballots.

National Election Day is Nov. 6, and since many service members and their families are stationed or deployed overseas, they are required to submit an absentee ballot to their local county in order to vote for the election.

"An absentee ballot is classified by a ballot that

your local county will send you with a list of nominees for election," said Maj. Carrissa Grant, 18th Wing installation voting assistance officer.

There are two types of ballots, Grant said. The first type is the absentee ballot local counties send U.S. citizens stationed overseas - service members, dependents and civilian employees - and deployed personnel. The second type is a write-in ballot.

In the case of a delay in the postal system, or counties sending ballots out late, some citizens may not re-

ceive their official absentee ballot, Grant said. In turn, service members and civilian employees are encouraged to send in a write-in ballot from the Federal Voters Assistance Program website, available at www.fvap.gov.

Grant said the first and easiest way a citizen can get the write-in ballot is by going to the FVAP website. The other way is by contacting a unit voting assistance officer.

One of the challenges faced with voting overseas is ensuring service members send their application back in a timely manner as well as returning the voting ballot

once received, Grant said. To help expedite the process, the post office is now providing free express mail of all absentee ballots whether it's one from a county or write-in ballot.

All U.S. citizens stationed overseas or deployed, whether they are active-duty members, dependent spouses, or civilian employees, should express their right to vote, Grant said. For more information about voting, or to obtain an absentee or write-in ballot, visit the FVAP website or contact a representative at vote@fvap.gov.

AFLINK mobile app keeps people connected to everything Air Force

FORT GEORGE G. MEADE, Md. (AFNS) - Staying connected and keeping up with the latest news and information has never been easier for America's Airmen.

On the Air Force's 65th birthday, Sept. 18, officials announced that the service has released a mobile application designed to keep Airmen, families, retirees, recruits and the public informed about the latest happenings around the force.

The AFLINK mobile application for phones and tablet computers aggregates up-to-the-minute content including headlines

from the official Air Force website, Airman magazine, Air Force Blue Tube, the AF Week in Photos, Air Force Inventory and ceremonial music from the Air Force Band; it also allows sharing through Facebook, Twitter and more.

"There are so many apps out there these days that it's tough to choose which ones to keep on your phone or iPad," said Airman 1st Class Zach Vucic, a beta tester who reviewed the app during development. "It's always updated with the latest Air Force news, awesome photos and new videos. Whether you are

already in the Air Force or even thinking about joining up, you need this app."

AFLINK is free and available now for download. It is presented in several languages on the Apple App Store and the Google Play Store for Android. It is accessible worldwide via those online stores so that Airmen stationed overseas can also stay connected.

"This handy app will change the way Airmen and anyone interested in the U.S. Air Force will get the latest news and factual information about the service," said James Pritchett, deputy director

of Air Force Production. "One of the most useful features is the Air Force Inventory section. It not only has beautiful photographs of the aircraft and other Air Force hardware, it also gives you historical reference and up-to-date details about each piece of equipment.

"In the past, we had to wait a year for publication of an annual almanac or wait until you could get to a computer to get all of this info in one place," Pritchett said. "Today, AFLINK provides all this information at your fingertips, wherever you are in the world."

Air Force tanker crew assists stricken jet fighter

By Capt. Martha L. Petersante
376th Air Expeditionary Wing Public Affairs

TRANSIT CENTER AT MANAS, Kyrgyzstan (AFNS) - When the 22nd Expeditionary Air Refueling Squadron (EARS) crew stepped into their large tanker aircraft for a recent mission and departed the Transit Center at Manas, Kyrgyzstan, they believed they had just begun another "normal" day over Afghanistan.

This day, however, proved to be anything but normal as the crew found themselves in a unique situation, literally acting as a wingman to a much smaller fighter jet in trouble.

Capt. Michael Thomson, a 22 EARS pilot who was acting as an observer during this mission, said the day was part of standard operations in the assigned area. As the crew prepared to support their last regularly scheduled fighter aircraft, a radio transmission from the lead aircraft, apprised the team of a sudden change of plans.

"The lead explained they were engaged in a troops in contact scenario and 'my wingman will be up for gas shortly,'" he said. "The lead moved into position, received the needed fuel and returned to the battlespace, then we waited for the other jet."

Moments passed as the KC-135 Stratotanker's Liberator crew awaited the second jet. Moments turned

into minutes and concern began to build among the refueling crew.

Lt. Col. Aaron Wardlaw, 22 EARS aircraft commander, made several attempts to contact the wingman on the air refueling frequency to no avail. Moments later, he saw the aircraft move around its 9-o'clock position and maneuver to the astern refueling position when the crew heard, "visual, request astern" crackling, barely audible over the tanker's radio.

Knowing something wasn't right, 22 EARS boom operator Senior Master Sergeant Keith Werner isolated radio contact with the fighter jet's pilot, establishing clearer communications.

"How are things going?" Werner said.

"The only thing working on this jet is my engine," replied the fighter pilot.

"Not the reply you want to hear, at altitude, over hostile territory," said Airman 1st Class Frank Pappalardo, a 22 EARS boom operator, who was assigned to observe the flight.

After the words echoed through the KC-135, the crew immediately began a closely-coordinated multitasking dance to gear up for potential emergency contingencies.

"By asking ourselves, 'What can we do and how



Left to right, Capt. Michael Thomson, Maj. Jody Griffin, Lt Col. Aaron Wardlaw, Senior Master Sgt. Keith Werner and Airman 1st Class Frank Pappalardo stand in front of a KC-135 Stratotanker at the Transit Center at Manas, Kyrgyzstan on 31, 2012. The 22nd Expeditionary Air Refueling Squadron KC-135 crew assisted stricken fighter aircraft by guiding it through a series of specific maneuvers to reset the on-board flight computers and allowing the pilot to regain effective communications and navigational instruments. (U.S. Air Force photo/Senior Airman Brett Clashman)

can we support?' we prepared for any scenario and ensured we were able to provide immediate support," Wardlaw said.

While taking on the initial fuel load, the stricken pilot told the crew he had engaged with troops on the ground and asked the boom operators to look his jet over for any possible battle damage. The two boom operators checked the fighter for damage simultaneously as the aircraft commander and copilot, Maj. Jody Griffin, teamed to ensure navigation

airspace kept them out of bordering countries, while maintaining fuel transfer to the aircraft.

The team worked to provide a stable platform to support the fighter off their wingtip within the assigned airspace at a constant speed and altitude. The pilot observer, Thomson, utilized the satellite radio to obtain up-to-date weather reports for possible landing airfields within the area of responsibility.

As the team worked in-flight emergency sce-

narios, the common theme remained, "He needs help; we're all he's got right now. We have to deliver," Wardlaw said.

The Liberator delivered during crunch time, guiding the aircraft through a series of specific maneuvers to reset the on-board flight computers and allowing the pilot to regain effective communications and navigational instruments.

"It's all about taking care of your own," Wardlaw said. "While we may operate different platforms,

ultimately he's a fellow Airman who needed our help on a bad day."

Thomson said the tanker crew didn't do anything special that day, just provide a little extra support and fuel while coordinating command and control information.

"It's our ability to provide air refueling that ensures a continued, minimal response time for direct support of coalition service members on the ground," Thomson said. "That makes us all one team."

Air Force officials outline cyber capabilities in today's fight

By Staff Sgt. Amanda Dick
Air Force Public Affairs Agency

WASHINGTON (AFNS) - The Air Force's chief information officer discussed the service's cyber capabilities and their importance in the joint fight during the Air Force Association's Air and Space Conference and Technology Exposition here Sept. 18.

Maj. Gen. Earl D. Matthews, director of network services, office of information dominance, explained the cyber mission's expansion and the focus shift from one of "net-centricity," or network defense, to one of information defense.

"Since the beginning of our Air Force, airpower has been in the

DNA of all Airmen," he said. "Airmen began to culturally appreciate the integration and relevancy of air and space power together.

As adversaries develop tactics and tools to thwart the Air Force, Airmen must remain vigilant in stymying information exploitation and solicitation attempts.

"We have to find ways to defend behind the line and fight through the attacks, since our adversary has found ways to be over, under, around and through our defenses," Matthews said. "We still need to protect the network, but we must also protect the reason for the

network: the data and information that ... flows through (it) and the value of that information."

Matthews cited examples of bolstering information defense such as better protection and security of personally identifiable information.

The Air Force, according to Matthews, must also partner with other services in the cyber domain, particularly in regard to the joint information enterprise and joint aerial layer network that each focus on situational awareness.

"We need to work with the joint community to clearly understand the joint warfighter cyberspace requirement, so we can posture our forces

appropriately to contribute to those missions," he said. "With this in mind, we will partner with our joint brothers and sisters to create a stronger and more interoperable cyber team."

Still, Matthews said, the cyber domain wouldn't be possible without "growing and fostering premier cyberspace Airmen ... whose training gives them a well-rounded understanding and depth of knowledge regarding cyber networks and systems," that better enable the Air Force to support homeland defense issues.

Chief Master Sgt. Linus Jordan, command chief for Air Force Space Command, agrees, and

related the value of exploring solutions to an ever-evolving mission.

"How do we prepare our Airmen -- officer, civilian and enlisted -- for the demands of operation in cyber space?" Jordan asked in relation to creating stronger, more secure and more resilient cross-domain effects.

"As the service continues to embrace innovation and face challenges in cyber, we will need to consider that all of us are cyber Airmen to some degree," Matthews said. "Every one of us works, plays, learns, teaches and operates cyber throughout every single work day."

AEDC Information Line
454-3600
The AEDC Information Line is available for ATA employees to get the latest information on a wide variety of emergency circumstances that could impact base operations or driving conditions.

AF pilot helps Iraqis earn their wings

By Airman 1st Class Nathan Maysonet
47th Flying Training Wing Public Affairs

LAUGHLIN AIR FORCE BASE, Texas (AFNS) - Mounted aboard an armored suburban with a pistol at his side, one of Laughlin's own begins his days in Iraq checking in on classes miles apart, filled with students not unlike those he left in Texas thousands of miles from home.

Lt. Col. Chris Lachance, from Laughlin's 85th Flying Training Squadron, is one of a handful of American Airmen working to ensure that Iraqi Air force units at Al Sahra Airfield in Tikrit are getting the level of training they need to protect their skies.

"I look at the big picture from here to see if they are being taught and properly engaged by the American contractors and Iraqi instructor pilots," Lachance said. "I make sure Iraq is getting what it pays for."

The training, which was originally operated by the U.S., now lies in the hands of contractors and Iraqi airmen following U.S. departure from Iraq last year.

Now, just three Airmen review and advise the more than 800 civilian contracted

instructors and fresh Iraqi airmen. They are tasked with training the growing population of Iraqi students set to become their nation's future maintainers, pilots and air traffic controllers.

"If you were to squish Randolph, Keesler and Laughlin together, you'd get a picture of what our base here is like," Lachance said.

Lachance, who has served in Iraq for the last three months, acts as the security assistance lead in Tikrit for the U.S. Embassy's Office of Security Cooperation-Iraq. He helps advise Iraqi squadron commanders on the finer points of pilot training.

"We are teaching them to be a lot like Laughlin," Lachance said. "A pilot here or at Laughlin would recognize the training."

Much like Laughlin's specialized undergraduate pilot training, the pilots training in Iraq begin from scratch. They learn the basics of aviation following a syllabus similar to that used at Laughlin, said Lachance. But he said there are some differences.

"We in the U.S. Air Force are selected for a specialty and then train to perform



Iraqi student pilots prepare their T-6 Texan II aircraft for takeoff at the Al Sahra Airfield in Tikrit, Iraq. The T-6 is one of the final planes Iraqi pilots will train on before their flight training is complete. (Contributed photo)

that job," he said. "Because the Iraqi Air Force is so small, they each have to do so much more and it can be a distraction."

It's not uncommon for officers and enlisted Iraqis alike to work all night and show up the next day in class with little sleep, Lachance explained.

Other differences can be found in the schedule and in the resources available to the Iraqis for training. Due to limited fuel, only 10 to 15 sorties take place per day in comparison to the more than 250 flights at Laughlin's airfield, the busiest in the Air Force.

Additionally, the T-6 Texan II trainer, which is used by both countries as a key part in training, serves

different roles to each, he explained. At Laughlin, like all U.S. pilot training bases, the T-6 is flown for several months before the student is sent to either the T-38 for fighter training or T-1 for tanker and airlift training. In Iraq, though, the T-6 is used as a replacement for the T-38 portion of training.

Cultural differences also play a part in what Lachance and his coworkers deal with daily. Things in Iraq are slower paced, with decisions being made after both parties slowly get to know each other.

"We want to get it done now, but they like to move slowly," he said. "Following that pace has led to a good partnership that will give us friends for life."

New DOD Safe Helpline Mobile Application

WASHINGTON - The Department of Defense announced its new DOD Safe Helpline Mobile Application. With this new app, service members transitioning to civilian life will have access to critical resources that assist in managing the short- and long-term effects of sexual assault.

This new app is the latest in a string of technological innovations designed to support sexual assault victims in the military, officials said.

The app contains the option for users to record their current emotional state and create tailored self-care plans to address sadness, hopelessness and disconnection. These self-care plans include suggested resources and exercises, and can be stored for future reference. This includes a list of breathing, stretching and visualization techniques that can reduce anxiety, depression and symptoms of post-traumatic stress.

"Victims want to choose when and where they get support, so we are using technology to provide them as many options as possible," said Maj. Gen. Gary S. Patton, DOD Sexual Assault

Prevention and Response Office director. "This new app, tied into the Safe Helpline, is another tool to provide support to military victims of sexual assault."

Users can connect with live sexual assault response professionals via phone or anonymous online chat from their mobile devices for support. Users can also navigate resources - disability assistance, medical benefits, housing help and employment assistance - or search for resources near their base or installation. The Safe Helpline mobile app is for short-term self-care and is not to be used as a substitute for professional medical advice or a mental health treatment plan.

The DOD Safe Helpline Mobile App is free and available for download from the Apple and Android app stores. DOD administers Safe Helpline via a contract with the non-profit Rape, Abuse and Incest National Network, the nation's largest anti-sexual violence organization.

Additional information regarding the Department's Sexual Assault and Response Office can be found at <http://www.sapr.mil>.

Wind energy at Cape Cod to save \$1 million a year

By Amy Ausley
Air Force Civil Engineer Support Agency

TYNDALL AIR FORCE BASE, Fla. (AFNS) - The wind in Cape Cod, Mass., is about to be called into action once again to reduce energy costs and air pollution at the Massachusetts Military Reservation.

Air Force Space Command is preparing to install

two 1.6 megawatt utility-scale wind turbines at the station's early warning radar site, called PAVE Phased Array Warning System.

The Cape Cod Air Force Station, located at the MMR, has some of the best wind resources on the property, according to the

Department of Energy and the Massachusetts Renewable Energy Research Lab.

Cape Cod AFS has some of the highest electricity costs in the Air Force at \$0.133 per kWh and uses about 13,000 MWh a year. The two turbines will offset more than 50 percent of the station's annual electrical purchases. The economic benefit is expected to be \$1

million per year.

"The wind turbine project will help the Air Force meet its renewable energy goal of 25 percent by 2025," said Fox Theriault, AFSPC energy analyst and project manager. "The Air Force will get double credit for building a renewable energy project on the Air Force portion of the site and using the power in ac-

cordance with the Energy Policy Act of 2005."

In addition to saving money, the turbines will also help reduce pollution. Electricity for the area is usually produced by conventional fossil fuel power plants, which generate air pollution. Each wind turbine will reduce air emissions by more than 1,000 metric tons of combined

sulfur dioxide, nitrogen oxide and carbon dioxide annually.

The project was funded from the fiscal 2012 Energy Conservation Investment Program and is expected to pay for itself within 12 years. That means the Air Force will receive free energy for the remainder of the 20- to 25-year life span of the turbines.

Do your part – Please recycle this paper after reading!

Arnold Golf Course
454-7076

Check us out on Facebook! Arnold AFB Services Golf Course

Tuesday – Thursday Special: \$10 green fee for unlimited golf. Cart fee not included.

Sausage and biscuits available in the Pro Shop Monday through Friday. If you have an early golf outing during the week grab a quick breakfast before you start. These sausage and biscuits are from the Mulligan's Coffee Bar & Grill menu prepared in advance and placed in the warmer in the Pro Shop for your convenience. The biscuits are \$2 each and coffee is also available. The grill opens at 10:30 a.m. during the week and serves a full breakfast on Saturday and Sunday starting at 8 a.m. The Pro Shop will have the sausage and biscuits available starting at 7 a.m. Monday through Friday but limited quantities will be available so get them while they last.

Arnold Lakeside Center
454-3350

Check us out on Facebook! Arnold AFB Services Arnold Lakeside Center and Arnold AFB Services Information, Tickets and Travel

First Friday Jam has been cancelled for October but will return Nov. 2.

Friday dining room specials, 5-9 p.m.:
Oct. 5: Fried Catfish, \$9.95 member, \$11.95 non.

Oct. 12: Blackened Tilapia, \$9.95 member, \$11.95 non.

Oct 19: Oktoberfest, \$19 member, \$21 non., \$7.95 age 4-12

Oct 26: Prime Rib for Two, \$29.95 member, \$31.95 non.

Specials are subject to change so please call ahead for reservations and to ensure availability.

Jewelry Fair comes to Café 100 Oct. 26
Arnold Lakeside Center welcomes back Pretty Discoveries for a jewelry fair Oct. 26 in the A&E building, Café 100, from 8 a.m. to 2 p.m. All jewelry prices are below \$20 and they also carry belts and handbags.

Last Friday Trivia Contest is 6:30 p.m. Oct. 26 with questions in random categories. Teams may have up to four people. No cell phones are permitted during the event. Anyone using a phone while a question is underway will be disqualified. There are eight rounds with three questions per round. Each round teams have two, four and six points to wager before the question. Only one point value may be used per question. For example, if you wager four points on the first question then you must choose either two or six points for the next question. Whichever value is left must be used for the final question in that round. After the eighth round, teams may wager up to their total points earned for the final question. Prizes are awarded for top finishers.

Day Trip to Lynchburg coming Nov. 17. Plan ahead to come with us on a trip to Lynchburg to visit the town square, Miss Mary Bobo's for lunch then the Jack Daniel's Distillery Tasting Tour. The tasting tour differs from the regular tour in several different ways. It is slightly longer, including some stops not on the regular public tour and the groups are smaller. The biggest difference is at the end there is an opportunity to sample small amounts of the distillery's best-known products: the original Black Label whiskey, Gentleman Jack and Jack Daniel's Single Barrel whiskey. The three samples together total one ounce. We'll start the day at the ALC at 8:45 a.m. First stop will be to get the wristbands for the tasting tour then we will visit the square to take in downtown Lynchburg and the shops. At 12:45 p.m. we will meet at Miss Bobo's for our 1 p.m. lunch reservation. When we are called to our table we will sit down to a real home-cooked meal served family style with plenty of Southern hospitality. After lunch we'll go back to the distillery for our special tour. Cost for this hometown adventure is \$45 and the trip is for ages 21 and older. Call 454-3303 by Nov. 9 to sign up for this event. Remember to wear comfortable shoes and bring extra money for shopping and souvenirs.

Fitness Center
454-6440

Check us out on Facebook! Arnold AFB Services Fitness Center

See Briefs, page H3

Fiscal Year changes at the Fitness Center

The Fitness Center will have changes in the new fiscal year to include new hours, new classes, class modifications and revisions to the sports program.

Starting Oct. 1 the Fitness Center will have new hours open 5 a.m. – 7:30 p.m. Monday-Friday, 8 a.m. – 1 p.m. Saturday and closed Sunday.

Want to boost your metabolism and burn calories at the same time? The Fitness Center staff has a new class for you. Interval training will be 3:30-4:30 p.m. on Tuesday and Thursday led by certified Fitness Center staff. This class allows participants to utilize body weight, Kettlebells, barbells, and a variety of other equipment during intervals of varying intensity designed to promote overall fitness and functionality.

Boot Camp, Cycling and Yoga will continue with only minor changes. Yoga will continue to be held 11 a.m. – 12 p.m. Monday, Wednesday and Friday; however, Friday's class will now be by video instructor. Cycling will be 11 a.m. – 12 p.m. Monday, Tuesday and Thursday with Tuesday's class being instructed by video instructor. Boot Camp will maintain 6 a.m. – 7 a.m. timeframe on Monday, Wednesday and Friday.

New classes on the horizon include Kettlebell and Crossfit. Kettlebell training utilizes a weight resembling a cannonball with a handle and develops strength, power, flexibility and cardio conditioning. CrossFit is a high intensity workout which focuses on strength and conditioning. The Fitness Center staff also offers one-on-one training in Kettlebell and CrossFit.

Group classes are free to eligible patrons. All military of any branch, active duty, guard,



reserve or retired, and Department of Defense (DOD) employees, are eligible. ATA employees must be a Services Members First Plus member to become eligible.

Another change for the new fiscal year will be to the Intramural League Sports Program. Volleyball and Basketball will now be the only team sports offered and are called Single Round Robin events. The format will have every team play one another one time and whoever has the most wins will be crowned champion. Single Round Robin Volleyball rosters are due Sept. 24. Women's teams will play on Monday beginning Oct. 1 and Open (co-ed) teams will play on Tuesday and Thursday beginning Oct. 2. Single Round Robin Basketball rosters are due Dec. 17 with games starting Jan. 15. Games are played at 5:30 and 6:30 p.m. following USA Volleyball or NCAA rules and AEDC by-laws will also apply.

The Extramural League Sports Program

will have changes coming later in the year. Golf will continue play at Arnold Golf Course starting in April. Twenty four-person teams play either Monday or Tuesday for 19 weeks. Golfers who are not annual green fees players at Arnold Golf Course will be required to pay modified green fees.

New sports being added to the extramural program include archery and paintball. Watch for more details on these events coming soon.

All AEDC employees are eligible to participate in Single Round Robin sports and extramural programs. A limited number of off-base players may be added in order to have a more competitive experience. Call 454-6440 for complete rules, by-laws, other information and to sign up.

In addition to the classes and sports mentioned above, the Fitness Center has a variety of programs along with certified

See Changes, page H2



Oktoberfest Celebration at ALC Oct. 19

Arnold Lakeside Center will host an Oktoberfest celebration on Oct. 19 from 6-10 p.m. A traditional menu of jagerschnitzel, bratwurst, sour kraut, German potato salad, regular potato salad, German chocolate cake or cheesecake will be served. Cost is \$19 for members, \$21 for non members

and \$7.95 for ages 4-12. Reservations are required by Oct. 15. The Oom-Pah-Sters band will provide live entertainment complete with crowd participation. There will be German beer specials and you may bring your own stein. Call 454-3350 for reservations or more information.

Chili Cookoff set for Oct. 12

The annual Chili Cookoff is set for Oct. 12, behind the Arnold Lakeside Center (ALC), beginning any time after 10 a.m. Chili must be ready to present to judges by 4:45 p.m. with judging at 5 p.m. Teams entering the event will need to provide all of their own supplies to start, cook and complete their chili entry and plan to make enough to provide samples as well as a batch for final judging. Teams need to be self sufficient and make all necessary arrangements for electrical (if required),



tables, chairs, utensils, containers, ingredients, etc. The ALC will provide supplies for the judges and for the attending personnel not affiliated with a team to judge for people's choice. Any ties of any kind will be decided by public coin toss. Power may not be available to contestants so teams need to plan accordingly. Eight foot tables are available to rent from the ALC or Outdoor Rec (454-6084) for \$4 each and must be reserved in advance to guarantee availability. Costumes and booth decorations are encouraged but not required. Official rule sheets are available upon request. Cash prizes, sponsored by Ascend Federal Credit Union, will be given for best tasting (\$200), best tasting runner-up (\$125), most unusual ingredient (\$75) and people's choice voted on by others in attendance (\$100 plus half of voting form sales). People's choice votes are \$3 per person for a voting form entry and includes napkins, cups and spoons for every booth entered in the competition. Call 454-3303 to register your team by Oct. 9. No federal endorsement of sponsor intended.



Horizon is a Services Division publication designed to inform our customers of events and specials in Services Division activities. All program dates, times and prices are subject to change. Services Division mailing address is at 100 Kindel Drive, Suite C321, Arnold AFB, Tenn. 37389-3321

Services information written and provided by Tanya Heggard

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Services Division Phone Numbers

Area code 931 DSN 340
 Services Chief – 454-7779
 Services Deputy – 454-5915
 Community Services Flight Chief – 454-4062
 Complex Manager – 454-3367
 Arnold Lakeside Center (ALC) – 454-3350
 Arnold Lakeside Center catering – 454-3350
 Gossick Leadership Center – 454-4003

Hap's Pizza – 454-5555
 Café 100 – 454-5885
 Membership Information – 454-3367
 Information, Tickets & Travel – 454-3303
 Fitness Center (FC) – 454-6440
 Outdoor Recreation (ODR) – 454-6084
 includes Marina, FamCamp, Crockett Cove & Dogwood Ridge

Recycling – 454-6068
 Human Resources – 454-5481
 Marketing & Sponsorship – 454-3128
 Barber Shop – 454-6987
 Wingo Inn – 454-3051
 Golf Course (GC) – 454-GOLF (4653)
 Mulligan's Coffee Bar and Grill - 454-FOOD (3663)

October 2012

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
FC New hours begin	1 5 a.m. – 7:30 p.m. Mon.-Fri., 8 a.m. – 1 p.m. Sat., closed Sun. FC Cool 100 Challenge begins FC Volleyball begins 5:30 p.m. FC Boot Camp 6 a.m. FC Cycling Class 11 a.m. FC Yoga 11 a.m.	2 ALC AEDC Woman's Club 9:30 a.m. FC Cycling Class 11 a.m. FC Interval Class 3:30 p.m.	3 FC Boot Camp 6 a.m. FC Yoga 11 a.m.	4 FC Cycling Class 11 a.m. FC Interval Class 3:30 p.m. ALC Dinner & Movie Night "Madea's Witness Protection" PG-13 dinner 5-8 p.m. movie 6:30 p.m.	5 FC Boot Camp 6 a.m. FC Yoga 11 a.m. ALC Fried Catfish, \$9.95 member, \$11.95 non, 5-9 p.m. ALC First Friday Jam cancelled this month	6 ODR Archery Basics Class, 9 a.m., \$3, ages 10+, sign up, 454-6084 ODR Paintball, 9:30 a.m., ages 10+, \$35, sign up 454-6084
7	8 FC Open 5 a.m. – 6 p.m. FC Boot Camp 6 a.m. FC Cycling Class 11 a.m. FC Yoga 11 a.m.	9 FC Cycling Class 11 a.m. FC Interval Class 3:30 p.m.	10 FC Boot Camp 6 a.m. FC Yoga 11 a.m.	11 FC Cycling Class 11 a.m. FC Interval Class 3:30 p.m. ALC Dinner & Movie Night "Brave" PG dinner 5-8 p.m. movie 6:30 p.m.	12 FC Boot Camp 6 a.m. ALC Chili Cookoff, 10 a.m., judging 5 p.m., sign up 454-3303 FC Yoga 11 a.m. ALC Blackened Tilapia, \$9.95 member, \$11.95 non, 5-9 p.m.	13 ODR Paintball, 9:30 a.m., ages 10+, \$35, sign up 454-6084 ODR FamCamp outdoor movie for campers, "Snow White and the Huntsman" 7:30 p.m.
14	15 FC Boot Camp 6 a.m. FC Cycling Class 11 a.m. FC Yoga 11 a.m.	16 FC Cycling Class 11 a.m. FC Interval Class 3:30 p.m.	17 FC 5 Card Draw anytime 8 a.m. – 4 p.m. FC Boot Camp 6 a.m. FC Yoga 11 a.m.	18 FC Cycling Class 11 a.m. FC Interval Class 3:30 p.m. ALC Dinner & Movie Night "The Amazing Spiderman" PG-13 dinner 5-8 p.m. movie 6:30 p.m.	19 FC Boot Camp 6 a.m. FC Yoga 11 a.m. ALC Oktoberfest, \$19 member, \$21 non, 6-10 p.m.	20 ODR Blue Moon Fall Color Cruise, \$56, 8 a.m. – 2:30 p.m. ODR Archery Basics Class, 9 a.m., \$3, ages 10+, sign up, 454-6084 ODR Paintball Tournament, 10 a.m., ages 10+, \$55/team, sign up 454-6084
21	22 FC Boot Camp 6 a.m. FC Cycling Class 11 a.m. FC Yoga 11 a.m.	23 FC Cycling Class 11 a.m. FC Interval Class 3:30 p.m.	24 FC Boot Camp 6 a.m. FC Yoga 11 a.m.	25 FC Cycling Class 11 a.m. FC Interval Class 3:30 p.m. ALC Dinner & Movie Night "Dark Shadows" PG-13 dinner 5-8 p.m. movie 6:30 p.m.	26 FC Boot Camp 6 a.m. ALC Jewelry Fair, Café 100, 8 a.m. – 2 p.m. FC Yoga 11 a.m. ALC Prime Rib for Two, \$29.95 member, \$31.95 non, 5-9 p.m. ALC Last Friday Trivia, 6:30 p.m.	27 ODR Paintball, 9:30 a.m., ages 10+, \$35, sign up 454-6084 ODR Fright Fest, Crockett Cove, 6 p.m., costume contest, bonfire, weenie roast, spooky trail, outdoor movie, \$5, 12 & under free, sign up by Oct. 25, 454-6084
28	29 FC Boot Camp 6 a.m. FC Cycling Class 11 a.m. FC Yoga 11 a.m.	30 FC Cycling Class 11 a.m. FC Interval Class 3:30 p.m.	31 FC Boot Camp 6 a.m. FC Yoga 11 a.m.			

Hours of operation

Arnold Lakeside Center: Catering/Management offices by appointment. Cashier Monday through Friday 9 a.m.-4 p.m. Dinner: full menu available Thursday 5-8 p.m., Friday and Saturday 5-9 p.m.; Main Bar Thursday 5-8 p.m., Friday 4-10 p.m. and Saturday 5-10 p.m.; Social Hour Friday 4-6 p.m., Movie Night Thursday 6:30 p.m.
Information, Tickets & Travel (ITT): Tuesday through Friday 10 a.m. – 3 p.m.
Café 100: Monday through Friday 6:30 a.m. – 1:30 p.m. Closed Oct. 8
Barber Shop: by appointment – Monday, Tuesday, Thursday & Friday 8 a.m. – 4 p.m. Closed Oct. 3-8
GLC: Monday through Friday 7 a.m. – 3:30 p.m. May vary depending on bookings. Closed Oct. 8
Outdoor Rec: Tuesday through Sunday 8 a.m. – 6 p.m. FamCamp Store: Friday through Sunday 12-4 p.m.
Fitness Center: Monday-Friday 5 a.m.-9 p.m.; Saturday 8 a.m.-4 p.m. Open 8 a.m. – 1 p.m. Oct. 8, no classes
Arnold Golf Course: Pro Shop & Driving Range 8 a.m. – dusk; 7 a.m. – dusk. Driving Range open 24 hours with prepurchased key card. Mulligan's Coffee Bar & Grill Monday through Friday 10:30 a.m. – 2 p.m., Saturday and Sunday 8 a.m. – 2 p.m.
Recycling: Monday through Friday 7 a.m. – 4 p.m. Closed Oct. 8
Wingo Inn: Monday through Friday 7 a.m. – 6 p.m., Saturday and Sunday 8 a.m. – 4 p.m.
Nonappropriated Funds Human Resources: Monday through Friday 7:30 a.m. – 4 p.m. Closed Oct. 8

BX/Commissary customer eligibility

AEDC government civilian and AEDC contractor employees have access to the following limited items at the base exchange (BX): consumable items including toiletries and over-the-counter pharmaceuticals, food items such as candy, chips, little meal items, hot dogs and soft drinks. Alcohol and cigarettes are not included as consumable items. However, only active duty and retired uniformed services personnel and their dependents are eligible to use the base commissary next to the BX. The commissary hours of operation: Tuesday, Wednesday and Friday 9 a.m.-5:30 p.m., Thursday 9 a.m.-6 p.m. and Saturday 8 a.m.-4:30 p.m. The BX hours of operation: Tuesday through Friday 9 a.m.-5:30 p.m., and Saturday 8 a.m.-4:30 p.m. For more information contact Chris Floden, BX manager, at (931) 454-7153 or Jeff Lillard, Commissary manager, at (931) 454-3545.

AAFES Dividends

Dividends generated from the Army and Air Force Exchange Service (AAFES) overall earnings are a major contributor to Services nonappropriated fund (NAF) construction and renovation projects as well as equipment purchases. Services would like to thank all AAFES customers for their support. Dividends received for July 2012 totaled \$7,749.92

CHANGES from H1

staff to help with your physical health. Do you want to work out but don't know what exercises would be best for you? Our staff has multiple certifications to meet your workout and assessment needs. Joe Watters is Hardstyle Kettlebell Certified (HKC) and a Cooper Institute Certified Personal Trainer (CI-CPT). Kevin Duncan is a CI-CPT and CrossFit

Instructor. Ron Stephenson has a degree in exercise science and human performance and is also a CI-CPT. In addition to prescribing an exercise program specific to your needs they can also provide individual fitness evaluations and equipment orientation. Call 454-6440 or stop by to schedule an appointment. Individual evaluations are done on a MicroFit

System which assesses an individual's cardio level, physical strength, flexibility and nutritional health. For military members, it allows them insight into how close they are maintaining the Air Force exercise standards. The main Fitness Center facility has a basketball/volleyball court, Cybex Arc-trainers, stability balls, medicine balls, weightroom, free weights,

fundamental training equipment, strength and cardio equipment and daily use locker rooms. The racquetball facility, next to the main building, has cardio equipment, two racquetball courts and daily use locker rooms with saunas. The Fitness Center also has a Fitness Annex located in the A&E Building in room C203 with cardio, free weights and weight machines.

The same eligibility applies to the annex and a pin number is required to gain entry through the cipher lock. When the weather allows, all AEDC employees may use the A&E track and running trail. The A&E track is a quarter mile with 6 lanes on a rubber flex surface. The running trail behind the Fitness Center is 1.75 miles with a gravel sur-

face and plenty of shade. Base security measures have eliminated the use of running trail badges for Fitness Center customers. The turnstile connecting the Wattendorf entrance to the mission area may only be opened by swiping an AEDC security issued badge. Throughout the year the Fitness Center has monthly special events for all AEDC employees.

The showcase event is the Health and Wellness Expo held in May. Local businesses in the health and wellness fields provide information, demonstrations from chiropractors and shoe specialists, along with the Fitness Center providing information, minor assessments and door prizes. Call 454-6440 today for more details, to sign up for sports or for eligibility.

Briefs from H1

holiday. Classes will be held as normal.

Single Round Robin Volleyball will begin Oct. 1 with Women's teams playing Mondays and Open (co-ed) teams playing Tuesdays and Thursdays. Games will be at 5:30 and 6:30 p.m. each night. Ages eighteen and older are eligible to sign up. Rosters are due Sept. 24 but players may be added to the roster mid way through the session. A limited number of off-base players may be added in order to provide a more competitive experience. The team with the most wins will be named champion and team members will receive a t-shirt. Complete rules and by-laws are available from the Fitness Center.

The Cool 100 Walk/Run Incentive Program begins Oct. 1. Participants log their miles using the honor system and have until the end of Dec. to log 100 miles. Participants may use the track located behind the A&E building, the trail behind the Fitness Center, a treadmill in the Fitness Center facilities or at home. These miles are to be turned in either daily or weekly. All who complete the program will receive a t-shirt. Call 454-6440 to sign up and remember to give your shirt size.

The 5 Card Draw Run/Walk will be Oct. 17 on the Fitness Center trail. Complete the trail anytime between 8 a.m. and 4 p.m. and pick up five cards along the way. Bring the cards, unopened, to the Fitness Center where they will be opened and recorded. The top three hands of the day will receive prizes.

Group Class Schedule starting Oct. 1:

Boot Camp - Monday, Wednesday and Friday 6-7 a.m.

Yoga - Monday, Wednesday and Friday 11a.m.-12p.m.

Cycling - Monday, Tuesday and Thursday 11a.m.-12p.m.

Interval Training - Tuesday and Thursday 3:30-4:30p.m.

Outdoor Rec (ODR) 454-6084

Check us out on Facebook! Arnold AFB Services Outdoor Recreation

Paintball continues with regular play every Saturday except third Saturday which is tournament day. Paintball is for ages 10 and older and ages 10-17 must have a parent permission form. Remember to wear appropriate clothing - long pants, a long-sleeved shirt and closed-toe shoes.

Regular Saturday play is every weekend from 9:30 a.m. to 2:30 p.m. except third Saturday due to monthly tournaments. Those interested need to call and sign up at least a day ahead of time to ensure equipment availability. When the day arrives, simply meet at the paintball field and get play underway with the direction of an Outdoor Rec (ODR) staff member. Cost is \$35 per person with equipment provided and includes 500 paintballs and a tank of air. It is \$20 per person for those with their own equipment and that also comes with 500 paintballs. All paintballs used must be purchased from ODR for \$13 per bag of 500 or \$45 for a box of 2000.

Monthly tournaments are on the third Saturday beginning at 10 a.m. Teams of four play double elimi-

nation to test your skills until the best team arises. Prior to the tournament there will be a 25-minute warm up field time with team on team play. There must be at least one team member above age eighteen and there must be at least eight teams to hold the tournament. ODR has 20 paintball guns available on a first come first served basis. Indicate at time of registration if you will be using your own equipment or need to reserve equipment. Cost to enter the tournament is \$55 per team and includes a bag of 500 balls and air for the day for each team member. The winning team will receive a free day of paintball (regular Saturday play) for all four team members valid for one year and includes equipment,

field fee, air for the day and a bag of 500 balls. Sign up deadline for the tournament will be the Tuesday prior and late registration/cancellation fees will be applied the Wednesday prior.

Call 454-6084 for more information about the paintball program or to sign up for these events.

Archery Basics Class will be Oct. 6 and 20 for ages ten and older. The class is \$3 and will begin at 9 a.m. Deadline to sign up is three days before each class. There must be at least three to take the course and no more than 12. This class will teach the basics of archery to include how to hold a bow properly, how to shoot with correct technique and also learn some history. Bows, arrows and targets will be pro-

vided but you may bring your own equipment if you have it.

Blue Moon Fall Color Cruise set for Oct. 20.

The Tennessee River Gorge is a beautiful trip in the fall. It is narrow with steep cliffs covered with hardwoods and just enough conifers to add some green to the gold, red and orange of the hardwoods. Join Outdoor Recreation (ODR) as we travel to Chattanooga to board the Blue Moon Cruise Oct. 20. The cruise consists of 12 miles into the gorge for a total trip time of 2 1/2 hours and includes a meal of pulled pork and chicken with all the fixin's. We will meet at ODR at 8 a.m. and return approximately 2:30 p.m. This trip is for all ages and cost is \$56 per person.

Remember to bring your camera and extra money for drinks and/or souvenirs. Call 454-6084 by Oct. 4 to sign up for this trip. There must be at least seven to go and no more than fourteen. Cancellations after Oct. 5 are non-refundable.

FamCamp outdoor movie night. FamCamp guests will be able to enjoy an outdoor movie for free beginning at 7:30 p.m. Oct. 13. Bring your chairs or blankets to the open grass area behind the upper bathroom. The movie will be "Snow White and the Huntsman" starring Kristen Stewart, Chris Hemsworth and Charlize Theron. In a twist to the fairy tale, the Huntsman ordered to take Snow White into the woods to be killed winds up becoming her protector and mentor

in a quest to vanquish the Evil Queen.

Wingo Inn 454-3051

Check us out on Facebook! Arnold AFB Services Wingo Inn

Reservations for Wingo Inn can be made 120 days in advance. Room rates start at \$39 per night. Please call 454-3051 for reservations.

Gossick Leadership Center 454-3024

Check us out on Facebook! Arnold AFB Services Gossick Leadership Center

October Movie Schedule

Movie nights are Thursdays with movie start time of 6:30 p.m. and dinner available from 5-8 p.m.



Movie nights are Thursdays with movie start time of 6:30 p.m. and dinner available from the Express or Pizza menus from 5-8 p.m.

Oct. 4 - "Madea's Witness Protection," rated PG-13 (1 hr. 54 min.) starring Tyler Perry, Eugene Levy and Denise Richards. A Wall Street investment banker who has been set up as the linchpin of his company's mob-backed Ponzi scheme is relocated with his family to Aunt Madea's southern home.

Oct. 11 - "Brave," rated PG (1 hr. 40 min.) starring voices of Kelly Macdonald, Billy Connolly and Emma Thompson.

Determined to make her own path in life, Princess Merida defies a custom that brings chaos to her kingdom. Granted one wish, Merida must rely on her bravery and her archery skills to undo a beastly curse.

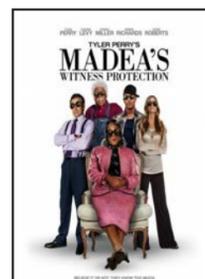
Oct. 18 - "The Amazing Spiderman," rated PG-13 (2 hr. 16 min.) starring Andrew Garfield, Emma Stone and Rhys Ifans.

Peter Parker finds a clue that might help him understand why his parents disappeared when he was young. His path puts him on a collision course with Dr. Curt Connors, his father's former partner.

Oct. 25 - "Dark Shadows," rated PG-13 (1 hr. 53 min.) starring Johnny Depp, Michelle Pfeiffer and Eva Green.

An imprisoned vampire, Barnabas Collins, is set free and returns to his ancestral home, where his dysfunctional descendants are in need of his protection.

Oct 4



Oct 11



Oct 18



Oct 25

The Green Scene

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Recycling Cardboard



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Thank You from The Green Team
Robbie Evans (manager), Doug Richards, Matt Gluck
931-454-6068